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May 2010

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Aaron Skinner's
1/35 scale
ZTZ-99B MBT

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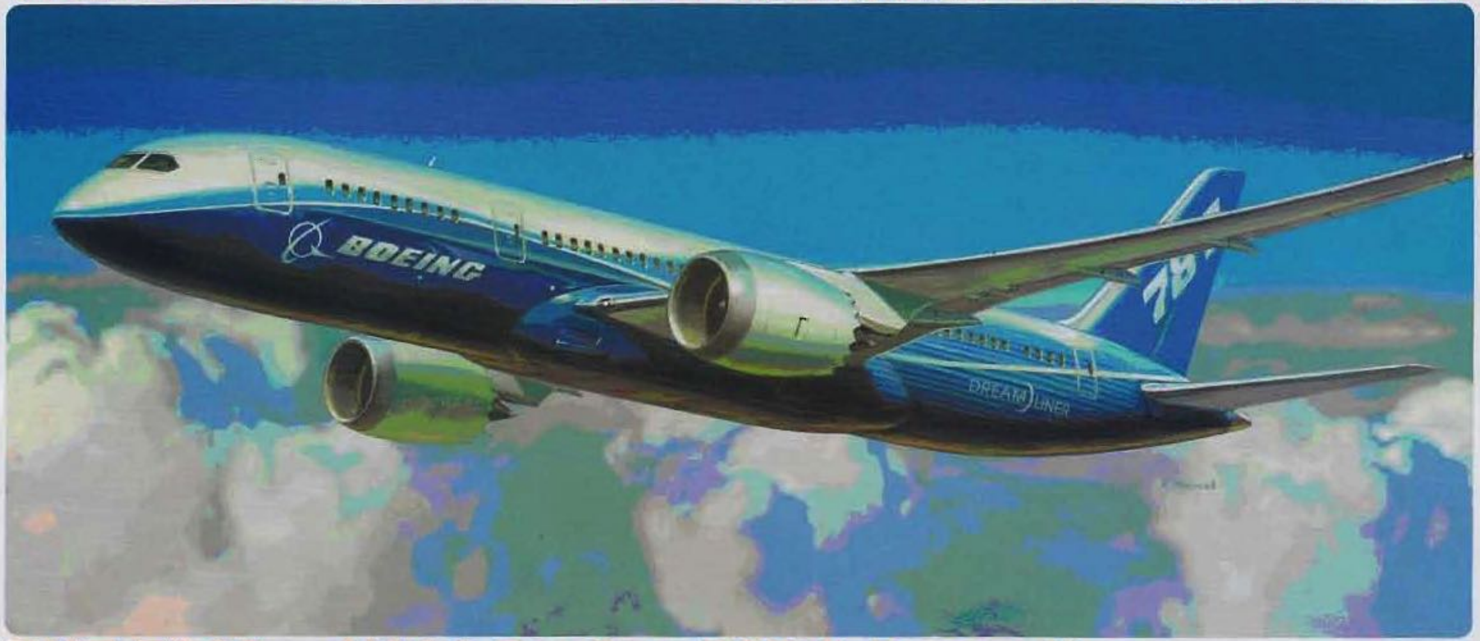

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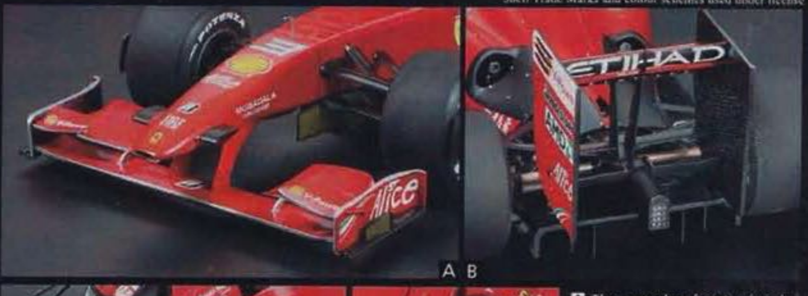

**A** The complex front wing is accurately reproduced, as is the front bulkhead. **B** Transparent parts are included to depict the taillight. **C** The 3-piece rear cowling can be removed to reveal metal-plated radiators and exhaust pipes. **D** Photo-etched seatbelt buckles enhance cockpit detail.

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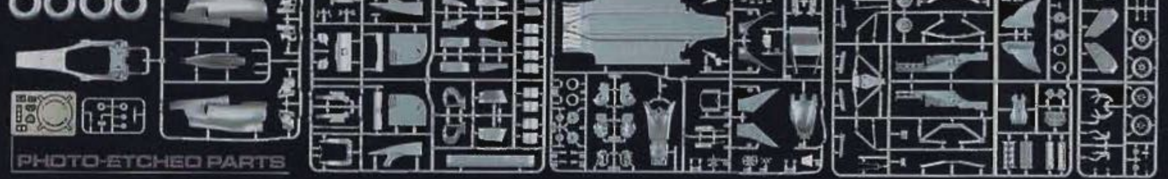

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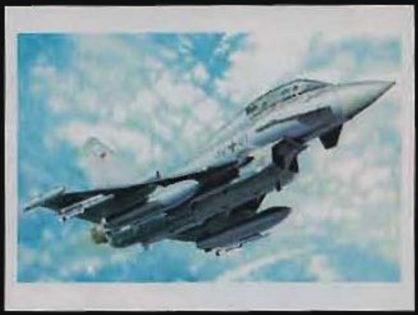
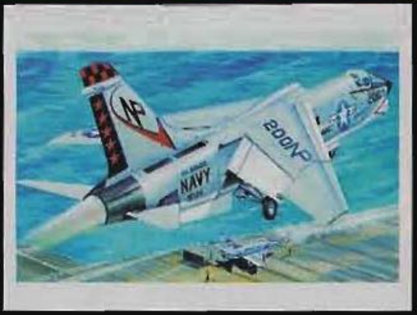


#2279 1/32 Eurofighter EF2000B Typhoon
#2278 1/32 Eurofighter EF2000A Typhoon



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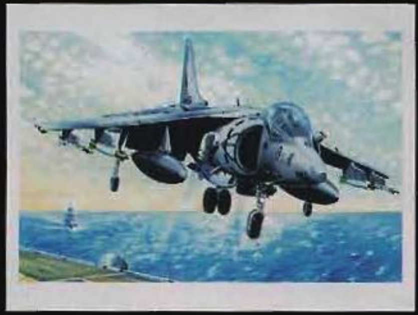

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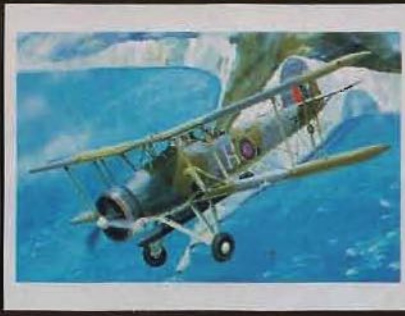

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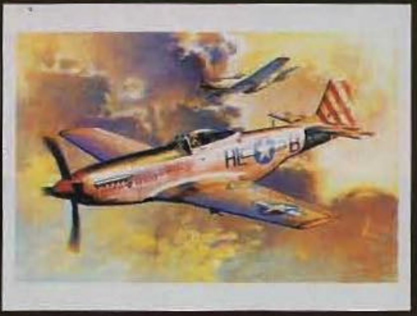
#3208 1/32 Fairey Swordfish Mk II



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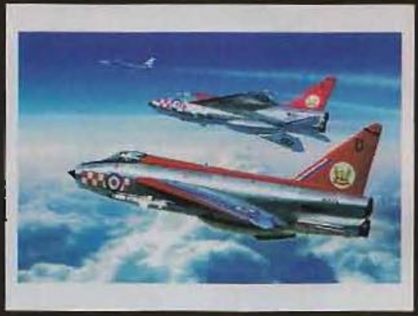
#2274 1/32 P51B Mustang Fighter



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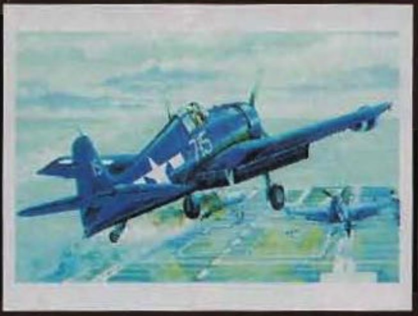
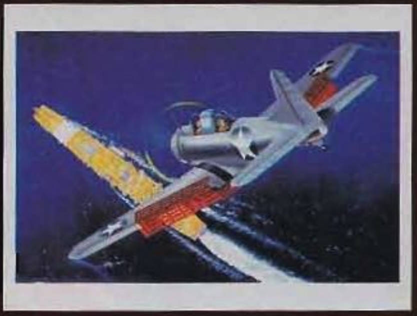
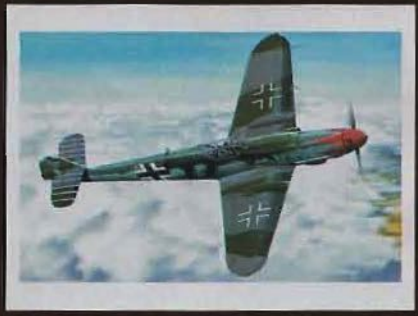
#2281 1/32 BAC Lighting F2A/F6



#2259 1/32 F6F5N Hellcat Fighter
#2258 1/32 F6F3N Hellcat Fighter



#2241 1/32 US Navy SBD1/2 Dauntless
#2244 1/32 US Navy SBD3 Dauntless



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## On the Cover

*FSM* associate editor Aaron Skinner gets in a sticky situation – and that's right where he wants to be, with plenty of masking tape to paint a digital scheme on a 1/35 scale Chinese ZTZ-99B tank.

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## Editor's Page

By Matthew Usher

# What is your most wanted kit?

**IF YOU TAKE** a look at the models in my house (both in the display case and in my "to-build" collection), it probably won't take you long to spot some major themes. One includes the aircraft my dad worked on while he was in the Navy in World War II – lots of blue-and-gray models, many of which have "cat" in their names. The odd assortment of car models reflects the odd assortment of full-size cars I've owned (driven, and/or pushed) over the years, and as a motorsports fan, there are plenty of race cars. And there are jets, spacecraft, ships, and examples of everything else I'm interested in.

But even with the huge variety of kits I have available, I can still easily rattle off a list of subjects I'd love to build – if only there were kits available. A 1/20 scale Lotus 18 for my Formula 1 collection; a 1/32 scale LEM to dock with my Monogram Command Module; a 1/48 scale Lockheed Electra (or Vega, or...).

Sorry. I'm sure you get the idea, though, and I'm sure you have your own short list of your most wanted kits.

**I'M SURE YOU HAVE YOUR OWN SHORT LIST**

What am I leading up to? It's that time again – every few years we ask you (and our other readers around the world) to cast a vote for what you'd most like to see as an all-new kit. You vote, we tally the responses and publish the results. And while we don't have a direct line to the world's model kit manufacturers, it's not uncommon for the top finishers in this poll to appear on hobby shop shelves as all-new kits.

You'll find the full story on how to vote for your most wanted kit on page 19. Vote now!

While everyone on our staff does great work on every issue, our Associate Editor Aaron Skinner deserves a little extra attaboy this time around for the great-looking digital camouflage tank he built (on deadline!) for this month's cover. He may have claimed the world record for cutting tiny masking tape rectangles during the build, and we appreciate it.

MATTHEW USHER

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### SCALE TALK

**Let us know what you think!** Comments, suggestions, corrections, and additional views on *FSM* articles are welcome. Mailed letters (address at left under *General*) should be typed or hand-printed and clearly marked "To the Editor" on the envelope. You can e-mail your comments to editor@finescale.com or visit FineScale.com and click on "Contact Us." Comments should be no more than 300 words. Please tell us your location.

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**Got a modeling problem?** Q&A is here to help. Mail your questions to "Q&A" (address at left under *General*), e-mail them to questions@finescale.com, or visit FineScale.com and click on "Contact Us" (here, you'll find "Hobby FAQ," which answers general modeling questions). We are unable to conduct lengthy research, such as answering questions on markings and unit histories. We publish letters of general interest; however, the volume of mail prevents us from answering every question in the magazine. Please include your name, address, and a daytime phone number.

### READER TIPS

**Would you like to share an idea about a tool or technique – and make a few dollars too?** Send a brief description along with a photograph or sketch to "Reader Tips" (address at left under *General*). Please enclose a stamped, self-addressed envelope for the return of photos. E-mail your tips to tips@finescale.com or visit FineScale.com and click on "Contact Us." Tips are paid for upon publication; if you live in the U.S., include your Social Security number. *FSM* obtains all publication rights (including electronic rights) to the text and images upon payment.

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# Scale Talk

Your voice in *FSM*

## Weathering wisdom

The why & how of
WEATHERING POWDERS

I just read Associate Editor Aaron Skinner's article "Weathering powders" in the February 2010 *FSM.* I saw an advertisement for these powders and wondered if anyone had experimented with possible methods of application. The article was excellent, timely, and much appreciated.

Aaron used Mig pigments in the article, so I decided to try Warpigs pigments. I found these to be excellent in color and applied them with a brush and also by hand. A brush worked best. I will say this: Use a breathing mask and eye protection, as the dust can be an irritant.

To complete weathering, I used Tamiya clear flat, dusting it on at first, then spraying a closer application after the first one dried. Applying too closely will blow the pigment away, and then it's back to the drawing board.
*William C. Herting*
*Cinnaminson, N.J.*

### Different modeling views

I just read Dennis Gerber's article, "Build and paint, step by step" in the February 2010 *FSM.* His modeling of the HH-65 Dolphin was very informative and a really nice build of the older 'A' model. Dennis is quite correct, you can't make a very accurate 'A' model with the contents of the Trumpeter kit.

GET STARTED WITH WEATHERING PIGMENTS
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HOW TO

There are a few things that I think need to be corrected. The seat on the rails is the flight mechanic's seat, not the rescue swimmer's as Dennis has it. The swimmers sit in the back on a cushion. Also, the tail stinger does not have the housing around it as the civilian version does; the bottom of the sliding cabin door is painted over; and the OADS mast, a very noticeable feature above the rotor beanie, should be added.

The USCG now uses the 'C' model of the Dolphin, and there are some aftermarket companies that make the items needed to produce a very accurate C, which has the same engine cowling as the civilian version Trumpeter uses.

Thanks for a great article!
*Don MacIntyre*
*Interlochen, Mich.*

### Perfect combo

I subscribe to several magazines, and I am also a frequent visitor to the Web sites and online versions of some of those same magazines. Out of all of them, *FineScale Modeler* seems to have found the best integration of the two media. The magazine and Web site complement each other very well. Putting the video issue previews with expanded coverage from the magazine on FineScale.com keeps me coming back each month.

Keep up the good work.
*Joe Vincent*
*Cordova, Tenn.*

### Showing off

I started modeling again about a year ago and am working on several kits at the moment. Some are even close to being finished ... sort of.

Anyway, I have been trying to decide where and how to show off my finished models, which brings me to this letter. I would really like to see an article in your magazine on how to make various display cases, particularly something with a light inside it.

I love your magazine. Keep up the good work.
*Jay Masters*
*Goondiwindi, Queensland, Australia*

*To get tips on displaying your finished models and other useful modeling tips, visit* FSM's *Tips Database at www.FineScale.com.*

### Kudos on kit reviews

I really enjoy reading every issue of *FSM.* My favorite section is always Workbench Reviews. Not only do I get building tips, but the reviews give excellent suggestions for kits to add to my collection. I build 1/35 scale armor and 1/48 scale aircraft, but the Workbench Reviews have gotten me into 1/350 scale ships.

My only complaint is that in some of the articles, the reviewers refer to using paints that are not available to us mortals, such as "my dwindling stock of Aero-Master." It would be helpful if commonly available paints were indicated. Other than that, great job on the reviews!
*Rob Julyan-Saint Claire*
*Aurora, Colo.*

### Answers to those history questions

I am a warship modeler and often have many research questions about the models I build, such as specifics of a particular camouflage pattern. I recently started reading *Warships International Fleet Review*, a publication dedicated to the history of naval ships. Recently it did a two-part history of the Japanese navy's World War II motor torpedo boat program.

*Fleet Review* also has an excellent question and answer section that reaches thousands of naval historians, experts, and ship buffs all over the world.

Happy modeling!
*John Pauly*
*Buffalo, N.Y.*

### Modeling movies

First off, I think *FSM* is a fine magazine and I love FineScale.com. You have made a really nice new site.

I have one request: More how-to videos! I would love to see one on applying pigments. I think you guys and gals are onto something good.

*Clayton McClain*
*New Carlisle, Ohio*

### 40 more years, 40 more years

I've been a subscriber of *FineScale Modeler* for about five years now, and I think you have a great magazine. I really appreciate *FSM*'s comprehensive approach to subject and content. There's something for the beginner and expert alike.

I've been building since 1963. My first kit was a 1/48 scale Grumman Panther that I would run down the sidewalk on my imaginary way to Korea. I still have a few models I built as a teenager, but for the most part I have no room left to display finished kits. After a few dozen of them, display space becomes an issue of marital harmony!

So I have two strategies. One is to enjoy partial builds, whereby I do all of the hard and tedious tasks first. The other is to send my completed works to good homes where they can enjoy prominent display.

Editor Matthew Usher's editorial in the February '10 issue really struck a chord with me. In it, he described answering questions about the scale modeling phenomenon. I've often thought about the folks who have designed and tooled the dies for the kits I'm building, I suppose nowadays it's done with CAD-CAM. Back in the 1950s and '60s, it was probably all accomplished by the skilled hands of master die makers.

It would be great to read a special feature about some of the great artists who designed all the terrific box art that lured me like a siren to buy hundreds of kits over more than 40 years.

I'm looking forward to another 40 years of model building, and another 40 years of *FineScale Modeler* as well.

*Dominic Hay*
*Maple, Ontario, Canada*

*In the January 2002* FSM, *Tom Graham profiled four box artists in "Four classic Revell artists." This and other back issues are available online at www.FineScale.com.*

### On one side of the coin ...

I just wanted to take a moment and say I love your magazine.

I recently bought the February '10 issue and was impressed by the content. However, I was somewhat perturbed by the comments of Dan Ingrim in Scale Talk regarding John Vojtech's 1/32 scale F-15C Eagle featured in the December '09 issue. The comments like, "Live (or even inert) weapons should not be part of the display," and, "As represented, John's airplane looks like it's in need of weeks and weeks of work," don't make sense to me.

Dan is missing the whole point of John's presentation. The build was to show off not only technical prowess but also what is underneath the paint and sheet metal on an F-15. This display is no different then a cutaway drawing in a book or manual. I believe this build should inspire modelers to attempt these techniques on their own projects and to really push the envelope with kit building. Instead, negative comments like these are just going to stifle creativity.

*Ian T. Holahan*
*Winston-Salem, N.C.*

EXCLUSIVE

Showcase Special

Big, superdetailed, and lighted, this Eagle soars!

### ... and on the other

In response to Dan Ingram's comments about John Vojtech's F-15: I have often had the same thoughts. As a former USAF aircraft maintainer from the Vietnam era, I know far too many models are depicted with weapons loaded and in a state of maintenance that just would not be.

We often did light or preparatory flight maintenance with the weapons loaded, but never after the impulse carts were installed in the pylons, MERs or TERs. Once the weapons folks had done stray voltage checks, installed carts, and armed the aircraft, maintenance was restricted to Red Ball [high priority] responses after the pilot arrival and engine start.

If panels had to be pulled, then the weapons would be downloaded and the aircraft made safe for maintenance. It all looks really neat modeled that way, but Dan's right. It was just not allowed, for the safety of all concerned. This does not, however, detract from John's exquisite work and a beautiful model.

Very well done, John!

*Barry Chandler*
*Winston Salem, N.C.*

### Keep 'em coming

I am a longtime modeler, and I've really enjoyed the new how-to videos on FineScale.com. I always use individual-link tracks, and I have learned quite a few tips from Associate Editor Aaron Skinner's video "Assembling individual-link tracks."

I would like to see much more. How about a basics, advanced, and master section? I would really like to see things like masking and painting camouflage and attaching photoetched metal.

*Edward J. Skerness*
*Westerville, Ohio*

Compiled by Aaron Skinner

## Big but not too big *Yamato* from Fujimi

Like the *Bismarck* and *Arizona*, Japan's battleship *Yamato* is a perennial favorite of modelers. Fujimi recently released a kit (No. 610009) that's perfect for *Yamato* fans who like something bigger than 1/700 scale but don't have the room for 1/350 or 1/200 scale battleships.

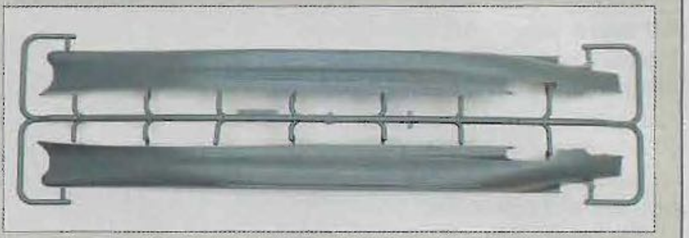
At 1/500 scale, the *Yamato's* hull, molded in sturdy, thick plastic, measures more than 20" long. Fujimi includes a bunch of braces for the hull that should make the structure very solid.

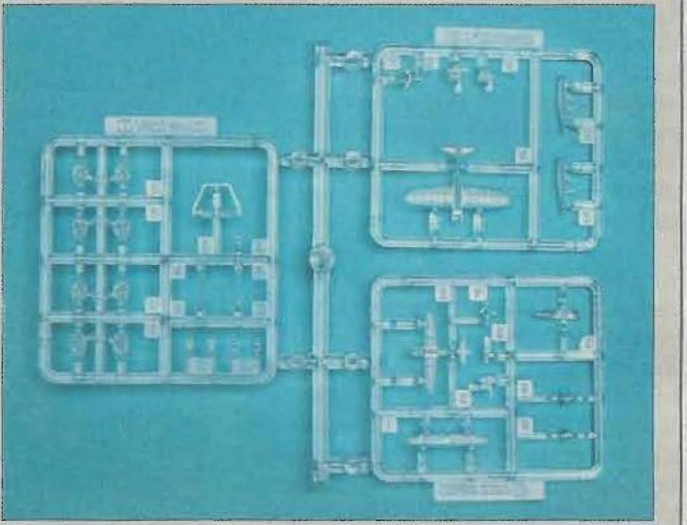
The scale fidelity of the parts is fine, with thin railings and space between the anti-aircraft gun barrels.

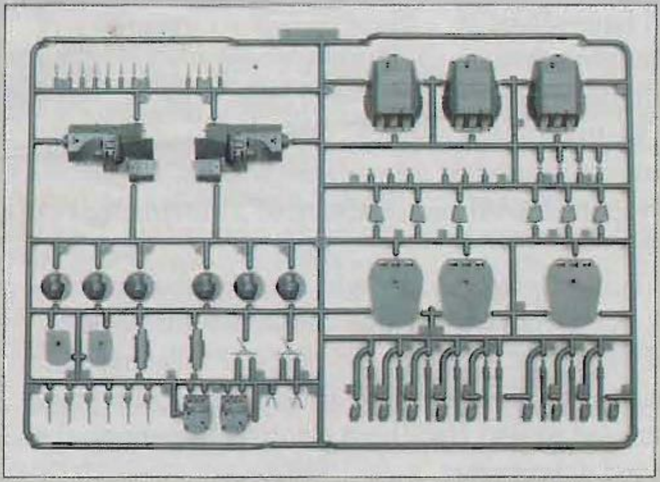
The basic kit includes turned-brass barrels for the main guns and clear parts for the floatplanes and searchlights.

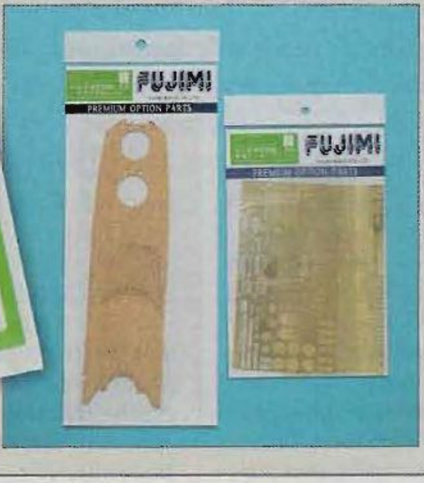
In addition, Fujimi released a premium photoetched-metal detail set (No. 112374) including railings, catapults, textured decks, and barrels for secondary armament. To further enhance the model, Fujimi offers a self-adhesive, die-cut wood deck with plank detail (No. 112381).

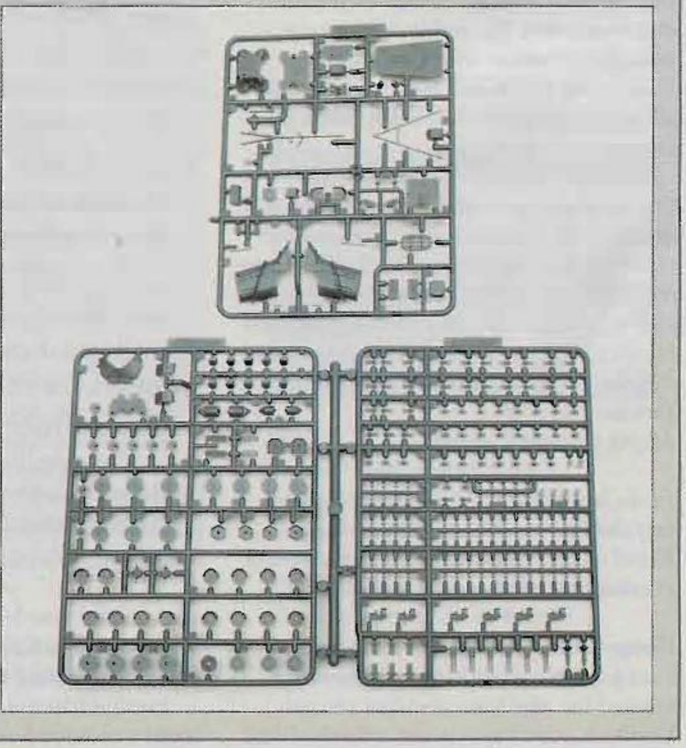
Distributed in the U.S. by Dragon Models USA, the *Yamato* retails for $179.95. The detail sets are available separately; $89.95 for the photoetched metal, $79.95 for the deck.











## References for rotorheads

Hueys have long been popular subjects. Now, modelers have a comprehensive reference for the Bell helicopter.

From Werner's Wings come two walkaround DVDs featuring hundreds of photos of UH-1s, compiled by Ray Wilhite. Volume 1 features the short-bodied A, B, F, L, M, and P models. Volume 2 details long-bodied variants, including D, H, N, V, and Y models. Each aircraft is cataloged by serial number and location.

Modelers looking for detail images of a particular airframe part will find individual photos tagged by section – armament, cockpit, nose, tail, etc. – so a search for that term returns all of the photos of that section. That should make getting the details of a particular part easy.

The discs are available from Werner's Wings, www.wernerswings.com, for $12 each.

Rotorwash Walk Around Series
Long Bodied UH-1 Hueys
Werner's Wings presents
Rotorwash Walk Around Series
Short Bodied UH-1 Hueys

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## Hawkeye markings for Kinetic kit

Bingo Decals
VAW-77 Nightwolves
VAW-88 Cottonpickers
1/48 E-2C Hawkeye
600 AF 601 AF 602 AF
013 014
NAVY NAVY

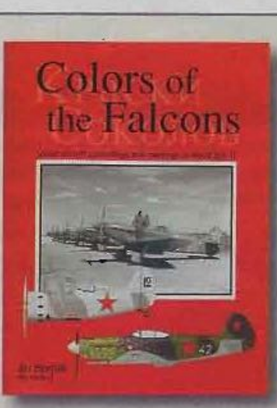
Hot on the heels of Kinetic's big E-2C kit (reviewed on Page 61) come decals designed for it. New company Bingo Decals' first release (No. 48-001) is a set of markings for Hawkeyes from VAW-77 Nightwolves and VAW-88 Cottonpickers.

Printed by Cartograf, the large sheet has high- and low-visibility markings for three Nightwolves aircraft and two aircraft from VAW-88, minus national insignia and stencils. Simple location diagrams are included.

On Bingo's Web site, www.bingodecals.com, designer Steven Ognibene has notes about a few small errors in the sheet and how to correct them. There you'll also find information about future releases featuring Hawkeyes from VAW-110 Firebirds, VAW-113 Black Eagles, VAW-115 Liberty Bells, and VAW-122 Steeljaws. Steve also invites visitors to sign his guestbook with suggestions for other E-2 schemes.

The first sheet is available on the Web site for $16.

## Soviet aircraft camo revealed



The Soviet air force in World War II was both large and diverse with aircraft of domestic and foreign manufacture.

The variety of colors and camouflage schemes used was almost as extensive, as detailed in *Colors of the Falcons,* by Jiri Hornat and Bob Migliardi (ISBN 0-9739994-0-3).

It is published by Iliad Design of Ontario, Canada, a company best known for producing interesting, offbeat decals for many different aircraft.

The authors concentrate on official color schemes, with reproductions of painting diagrams from a 1943 directive as well as photos and four pages of color profiles. The emphasis on colors will be a great help to modelers. An appendix lists all of the colors mentioned in the text, each with a description and approximate Federal Standard equivalent if applicable.

Other chapters examine naval aircraft camouflage, Lend-Lease planes, and nonstandard schemes.

The 56-page book is available from Iliad Design, www.iliad-design.com, for $18.95.

# New Products

Compiled by Monica Freitag

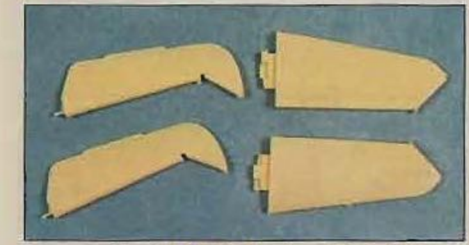
## AIRCRAFT»

### 1/32 SCALE KITS

British Royal Air Force Hurricane Mk.I (Early Version)
PACIFIC COAST MODELS, Inc

**British Royal Air Force Hurricane Mk.I (early version),** No. PCM32010, $69.95. From Pacific Coast Models, Inc.

### 1/32 DETAIL SETS



**Messerschmitt Bf 109 horizontal tail surfaces,** No. 32021, $9.95. Resin. From Master Details.

### 1/32 DECAL SETS

Wicked Women
P-38 LIGHTNINGS

**Wicked Women P-38 Lightnings: *Virginia Marie*,** No. 32-BS-0006, $16. From Bombshell Decals.

**Wicked Women P-38 Lightnings: *San Antonio Rose*,** No. 32-BS-0005, $16. From Bombshell Decals.

### 1/48 SCALE KITS

F16C BLOCK 32/52 "THUNDERBIRDS"

**F-16C (Block 32/52) USAF Thunderbirds** (2009 Far East Tour), No. 89799, $67. From Tamiya America, Inc.

F-16F (BLOCK 60) FIGHTING FALCON

**F-16F (Block 60) Fighting Falcon,** No. 07244, $52.95. From Hasegawa. Contact your local retailer for availability.

Fw 190 D-9
ProfiPACK
eduard

**Focke-Wulf Fw 190D-9,** No. 8184, $39.95. ProfiPack, German WWII fighter. From Eduard and Associates. Look for a detailed review in an upcoming issue of *FSM*.

1/48th Scale
T-2C BUCKEYE

**T-2C Buckeye US Navy intermediate jet trainer,** No. TBK48-002, $52. From Twobobs Aviation Graphics. Look for a detailed review in an upcoming issue of *FSM*.

A description of our new-product announcement and review policies is available from Product News Coordinator, FSM, 21027 Crossroads Circle, P.O. Box 1612, Waukesha, WI 53187, 262-796-8776, fax 262-796-1383, or e-mail at newproducts@finescale.com. *FineScale Modeler* is not responsible for content of external sites linked through our site. Visit our FSM Web page at www.FineScale.com.

### 1/48 DETAIL SETS

SR-71 Blackbird Landing Gear
48067
SCALE AIRCRAFT CONVERSIONS

**SR-71 Blackbird landing gear for Testors/Italeri,** No. 48067. $18.95. White metal; **B-1B Lancer landing gear,** No. 48072. $24.95. White metal. From Scale Aircraft Conversions.

### 1/72 SCALE KITS

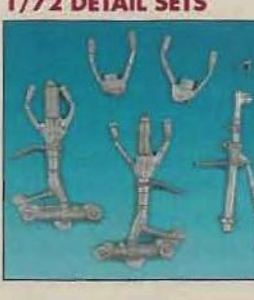
ICM
Su-27
Russian Aerobatic Team "Russian Knights" Plane
1:72

**Su-27 Russian aerobatic team "Russian Knights" plane,** No. 72223, $31.50. From ICM, available from Dragon Models USA Inc.

ICM
He 70F-2
German Reconnaissance Plane
1:72

**Heinkel He 70F-2 German reconnaissance plane,** No. 72232, $22.50. From ICM, available from Dragon Models USA Inc.

### 1/72 DETAIL SETS



**XB-70 Valkyrie landing gear,** No. 72005, $18.95. White metal From Scale Aircraft Conversions.

### 1/72 DECAL SETS

Corsica B-25J
Mitchell Bombers
Bombshell Decals

**Corsica B-25J Mitchell bombers,** No. 72-BS-0004, $16. From Bombshell Decals.

### 1/144 SCALE KITS

1/144 scale kit
A-4E/F
"SKY HAWK"
A-4E/F スカイホーク
PLATZ

**A-4E/F Skyhawk,** No. PD-18-1500, $18.95. Box includes two kits. From Platz, available from Dragon Models USA Inc. Look for a detailed review in an upcoming issue of *FSM*.

F/A-18E "Super Hornet" & F/A-18F "Super Hornet"
VFA-27 "Royal Maces"
VFA-41 "Black Aces"
DRAGON

**F/A-18E Super Hornet (VFA-27 "Royal Maces" and F/A-18F Super Hornet (VFA-41 "Black Aces,"** No. 4618, $12.95. From Dragon, available from Dragon Models USA Inc.

## ARMOR»

### 1/35 SCALE KITS

PANZERKAMPFWAGEN MK IV, 744(E) (A13)
CB-35030 1/35
BRONCO

**Panzerkampfwagen Mk.IV, 744(e) (A13),** No. 35030, $75.98. From Bronco Models, available from Stevens International.

RUSSIAN TANK DESTROYER SU122
TAMIYA

**Russian tank destroyer SU-122,** No. 89798, $38. Figure and Weathering Master set for Russian tanks included. From Tamiya America, Inc.

Triumph 3HW Motorcycle w/British MP Set
BRONCO
X2

**Triumph 3HW motorcycle with British MP set,** No. 35035, $55.98. Two motorcycle kits included. From Bronco Models, available from Stevens International.

German 2.8cm s.Pz.B.41 Anti-Tank Gun Set
德军2.8cm Pz.B.41 反坦克炮组
BRONCO

**German 2.8cm sPzB 41 anti-tank gun set (3 n' 1),** No. 35034, $44.98. New tool. From Bronco Models, available from Stevens International.

Limited 5000 sets
T34/76
Model 1942/43 Factory No.183
AFV CLUB

**T-34/76 Model 1942-43 (Factory No.183),** No. AF 35S57, $58. From AFV Club, available from Merit International.

Pz.Kpfw.III Ausf.N Sd.Kfz.141/2 w/Schürzen
DRAGON

**PzKpfw III Ausf N with Schürzen,** No. 6474, $47.95. Smart Kit, 1939-1945 series. From Dragon, available from Dragon Models USA Inc.

Sd.Kfz.250/10 NEU w/3.7cm PaK

**Sdkfz 250/10 NEU with 3.7cm PaK,** No. 6595, $41.95. Smart Kit. From cyber-hobby.com, available from Dragon Models USA Inc.

M4 DV
DRAGON

**Sherman M4 DV,** No. 6579, $47.50. Smart Kit. 1939-1945 series. From Dragon, available from Dragon Models USA Inc.

Pz.Kpfw.IV Ausf.J Mid Production
DRAGON

**PzKpfw IV Ausf J mid-production (August-September 1944),** No. 6556, $49.95. Smart Kit. 1939-1945 series. From Dragon, available from Dragon Models USA Inc.

featuring reviews, product information,
photo galleries, and more!

# New Products

U.S.M.C.
M50A1 ONTOS
ACADEMY

**M50A1 Ontos USMC,** No. 13218, $36. From Academy, available from Model Rectifier Corporation. Look for a detailed review in an upcoming issue of *FSM*.

R.O.K. ARMY K9
SELF-PROPELLED HOWITZER
ACADEMY

**R.O.K. Army K9 self-propelled howitzer,** No. 13219, $46. From Academy, available from Model Rectifier Corporation.

## Manufacturer Directory

**Bingo Decals**
7 Shadow Creek
Penfield, NY 14526
www.bingodecals.com

**Bombshell Decals**
3823 Sarasota Dr.
Fayetteville, NC 28311
910-717-6586
bombshelldecals.com

**Claude Joachim**
123 route d' Esch
L-4380 Ehlerange
Luxembourg
www.diorama-clervaux.com

**Dragon Models USA Inc.**
1315 John Reed Ct.
City of Industry, CA 91745
626-968-0322
www.dragonmodelsusa.com

**Eduard and Associates**
Obrnice 170
435 21, Czech Republic
420-47-611-8259
www.eduard.com

**Happy Medium Press**
www.scififantasymodeller.co.uk

**Iliad Designs**
334 Sunnyside Ave.
Ottawa, ON Canada K1S0S1
613-730-0580
www.iliad-design.com

**Master Details**
3501 W. Palmer Suite 2 Front
Chicago, IL 60647
773-772-7171
www.masterdetailsfromusa.com

**Merit International**
18229 Railroad St.
City of Industry, CA 91748
626-912-2212
www.merit-intl.com

**MIG Productions**
C/Merkatondoa 18, Nave 16B
31200 Estella (Navarra), Spain
34-948-555-772
www.migproductions.com

**Model Rectifier Corporation**
80 Newfield Avenue
P.O. Box 6312
Edison, NJ 08837
732-225-2100
www.modelrectifier.com

**Moebius Models**
PO Box 229372
Glenwood, FL 32722
386-956-4133
www.moebiusmodels.com

**The Original Super Glue Corporation**
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Rancho Cucamonga, CA 91730
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www.supergluecorp.com

**Osprey Publishing**
Elms Court, Chapel Way
Botley, Oxford
England OX2 9LP
44 1865 727022
www.ospreypublishing.com

**Pacific Coast Models, Inc.**
2987 Wiljan Court
Santa Rosa, CA 95407
707-538-4850
www.pacmodels.com

**Quayside Publishing Group**
612-344-8157
www.quaysidepublishinggroup.com

**Scale Aircraft Conversions**
3795 Shady Hill Dr.
Dallas, TX 75229
214-477-7163
scaleaircraftconversions.com

**Stevens International**
P.O. Box 126
706 N. White Horse Pike
Magnolia, NJ 08049
856-435-1555

**Tamiya America, Inc.**
36 Discovery, Ste. 200
Irvine, CA 92618-3765
800-826-4922
www.tamiyausa.com

**Twobobs Aviation Graphics**
4220 Knox Avenue
Rosamond, CA 93560
661-256-1396
www.twobobs.net

**Werner's Wings**
2718 Placid Ave.
Baltimore, MD 21234
www.wernerswings.com

### 1/35 DETAIL SETS

TOUCH SERIES

**WWII British Churchill,** Touch Series No. TH 35001, $8.98. From AFV Club, Hobby Fan Trading Co. Ltd., available from Merit International.

**IDF Shot Kal Centurion Mk.5/1 1973 Type for AFV Club,** Touch Series No. TH 35004, $8.98. From AFV Club, Hobby Fan Trading Co. Ltd., available from Merit International.

**WWII Russian T-34,** Touch Series No. TH 35002, $12.98. From AFV Club, Hobby Fan Trading Co. Ltd., available from Merit International.

**WWII German SdKfz.11 3T half truck early version for AFV Club,** Touch Series No. TH 35005, $8.98. From AFV Club, Hobby Fan Trading Co. Ltd., available from Merit International.

TOUCH SERIES

**Stryker family,** Touch Series No. TH 35006, $12.98. From AFV Club, Hobby Fan Trading Co. Ltd., available from Merit International.

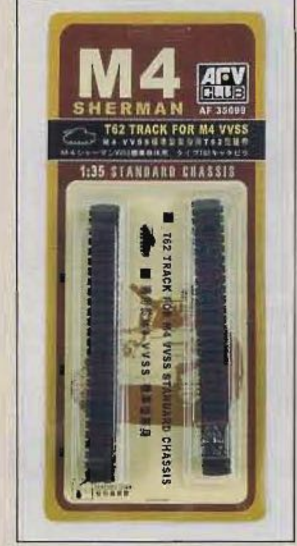
**12.8cm PaK 44/2 L/55,** No. LB3527, $18.95. From Lion Roar, available from Dragon Models USA Inc.

**Stryker upgrade equipment,** No. AF35S59, $20. From AFV Club, available from Merit International.

**Modern UK Centurion MK 5/1 for AFV Club,** Touch Series No. TH 35003, $8.98. From AFV Club, Hobby Fan Trading Co. Ltd., available from Merit International.

SYRIAN T-55 Conversion
MIG
1/35

**Syrian T-55 conversion for Tamiya,** No. MP35-320, $27. Battle of Beirut 1982, Lebanese war. Photoetch sight included; **Modern Russian tank fuel tank plumbing attachments,** No. MP35-350, $7. For T-54, T-55, T-62, T-69. Both From MIG Productions.


M4
SHERMAN
AFV CLUB
T62 TRACK FOR M4 VVSS
1:35 STANDARD CHASSIS

**T62 track for M4 VVSS (Sherman),** No. 35099. Contact your local dealer for price information. From AFV Club, available from Merit International.

### 1/72 SCALE KITS

ICM
3,7 cm Pak 36
WWII German Anti-Tank Gun
1:72

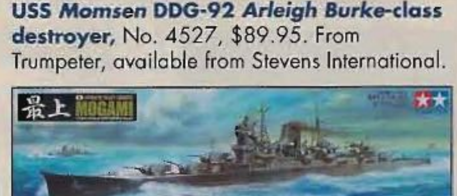
**3.7cm PaK 36 WWII German anti-tank gun,** No. 72251, $11.95. From ICM, available from Dragon Models USA Inc.

## SHIPS»

### 1/350 SCALE KITS

USS Momsen DDG-92

**USS *Momsen* DDG-92 *Arleigh Burke*-class destroyer,** No. 4527, $89.95. From Trumpeter, available from Stevens International.



***Mogami* Japanese heavy cruiser,** No. 78023, $200. Look for a detailed review in an upcoming issue of *FSM*. From Tamiya America, Inc.

JAPANESE NAVY
SUBMARINE I-58
伊號第五十八
潜水艦

***I-58* Japanese Navy submarine,** No. SE 73507, $33.50 . From AFV Club, available from Merit International.

GERMAN U-Boat
Type VII D
AFV CLUB

**German U-boat type VIID Minelayer,** No. SE 73505, $26.50. From AFV Club, available from Merit International.

### 1/350 DETAIL SETS

LS350011 WWII IJN DESTROYER KAGERO
陽炎
Lion Roar

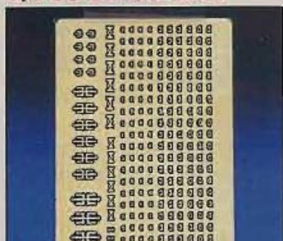
**WWII IJN destroyer *Kagero*,** No. LS350011, $67.95. Super detail set, update conversion, for Tamiya. From Lion Roar, available fromDragon Models USA Inc.

### 1/700 SCALE KITS

1:700 SCALE
USS MASSACHUSETTS BB-59

**USS *Massachusetts* BB-59 battleship,** No. 5761, $39.95. New tooling. Two OS2U-1 seaplanes included. Look for a detailed review in an upcoming issue of *FSM*. From Trumpeter, available from Stevens International.

### 1/700 DETAIL SETS



**WWII US Navy anchors and cable hole,** No. R7062, $5.95; **Navy cranes for battleship,** No. R7060, $7.95. From Lion Roar, available from Dragon Models USA Inc.

## MILITARY FIGURES»

### 1/35 SCALE KITS

"FRAGILE ALLIANCE" AXIS FORCES BALKANS 1943
DRAGON

**"Fragile Alliance" Axis forces Balkans 1943,** No. 6563, $10.95. 1939-1945 series. From Dragon, available from Dragon Models USA Inc.

MIG
1/35
U.S. INFANTRYMAN

**US infantryman (Iraqi Freedom No. 2),** No. MP35-314, $19. From Mig Productions.

**US Special forces (Afghanistan, Iraq),** No. MP35-313, $17. From Mig Productions.

## FANTASY FIGURES»

### OTHER SCALE KITS

MIG
Futuristic Russian Tanker
FANTASY SERIES
1/35
F35-700

**Futuristic Russian tanker,** No. F35-700, $19. Fantasy series. From MIG Productions.

## SCIENCE-FICTION»

### 1/35 SCALE KITS

LOST IN SPACE
JUPITER 2

**Lost in Space *Jupiter 2*,** No. 913, $109.99. From Moebius Models. Look for a detailed review in an upcoming issue of *FSM*.

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| | |
|---|---|
| 11194 | Set #4 |
| 27124 | Huck's Starter 1/72 |
| 11201 | Accessory Kit #6 |
| 24436 | Mitsubishi 1MF1 |
| 11202 | Accessory Kit #7 |
| 11203 | Gloster Grebe |
| 27022 | Airco D.H.5 1/72 |
| 11206 | DH5 |
| 11207 | Grumman XF5F 1 Skyrocket |
| 11208 | Fokker EV DV111 1/72 |
| 11209 | DeHavilland Vampire T11 1/72 |
| 11210 | DH9A |
| 11211 | Spitfire |
| 11212 | North American FJ4 B Fury |
| 11218 | Lockheed Orlon Mailplane |
| 11219 | PFAIZ Dr1 |
| 11220 | Hawker Woodcock |
| 11221 | Heinkel He280 V3 |
| 11222 | Cierva C30 Rota |
| 11223 | FB5 Gun Bus |
| 11224 | Junkers J.1 1/72 |
| 11225 | Beech D17 Staggerwing |
| 11226 | Nieuport 11 |
| 27018 | Westland Wapitl 1/72 |
| 27024 | Curtiss JN4 Jenny |
| 27035 | Gee Bee Racer 1/72 |
| 58705 | Hansa Brandenburg M20 1/72 |
| 11227 | North American 0-47 1/72 |
| 27019 | Nakajima Kikka 1/72 |
| 51007 | Bell P .59B Alracomet 1/72 |
| 11195 | Set #5 |
| 27013 | A.E.G. G.1V 1/72 |
| 21871 | Heinkel 162B 1/72 |
| 27015 | Breguet 14 B2 |
| 27030 | Junkers EF126 1/72 |
| 51406 | XF 91 Thunderceptor 1/72 |
| 27012 | Fairey Gordon 1/72 |
| 27031 | Curtiss P.400 1/72 |
| 24340 | Aviatik C.1 & 30-40 |
| 27028 | Heinkel P.1078 1/72 |
| 27032 | Lockheed 10 Electra 1/72 |
| 58584 | Fiat CR40 1/72 |
| 25254 | Rumpler D.1 |
| 25450 | Heinkel 162D |
| 27033 | D.H. 90 Dragonfly 1/72 |
| 25560 | G-AEDT D.H. 90 Dragonfly |
| 25717 | Supermarine S.4 Schneider Racer |
| 27125 | Accessory Set No.8 50 WWI Items |
| 58566 | FD-1 Phantom McDonnell 1/72 |
| 58586 | Fairey IIIF 1/72 |
| 58567 | Ikarus IK.2 & Arado 76 1/72 |
| 58568 | Arado 76 & Ikarus IK.2 1/72 |
| 58587 | FE2B 1/72 |
| 26999 | Junkers JU287 1/72 |
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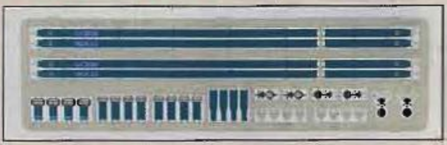

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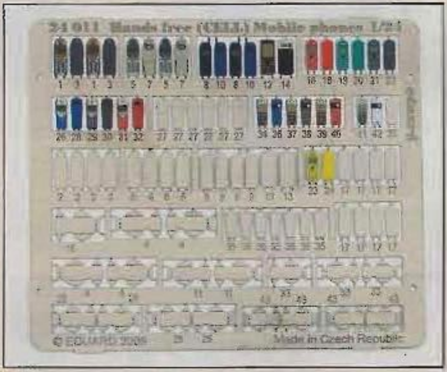

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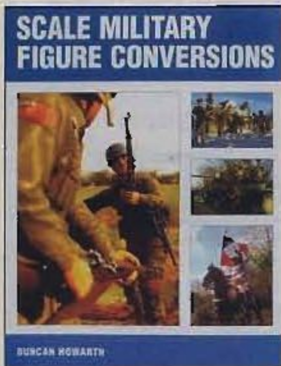
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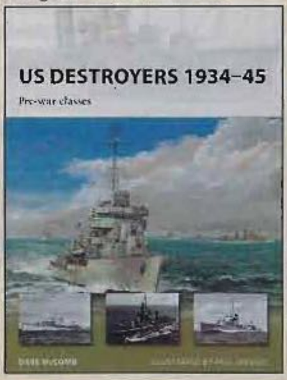
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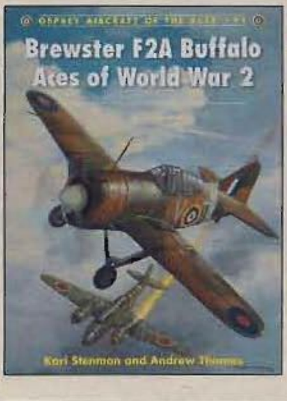
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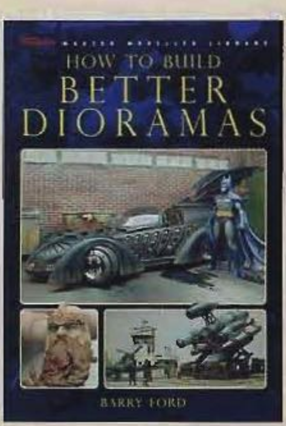
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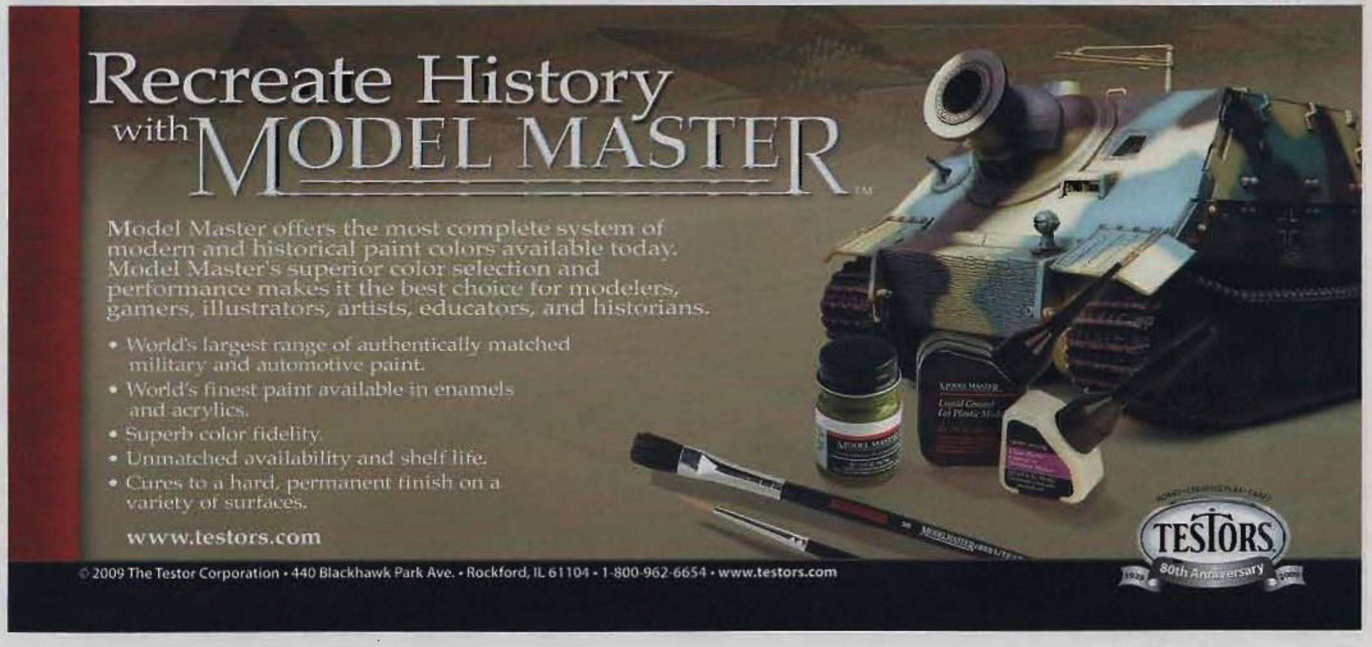
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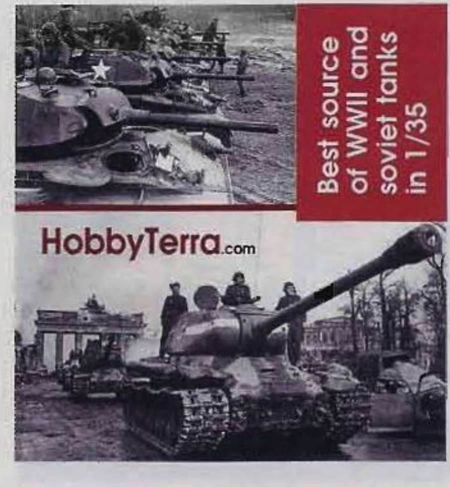

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# YOUR MOST WANTED KITS

### Cast your vote and maybe *your* ship – or plane, or armored fighting vehicle – will come in!

BY MARK HEMBREE

**A truly long-awaited ship arrived when Trumpeter produced a 1/350 scale HMS *Hood*, one of the kits that appeared near the top of the list in our 2005-2006 survey of most-wanted kits. We don't supply the information to anyone else – but when *FSM* readers speak, manufacturers listen.**

Anyone care to guess what sort of question is most frequently asked of our Questions & Answers column? I'll give you a hint: It begins with, "Does anyone make a ..."

Yet, after that, the topics vary widely. There is one constant – the most urgent requests regard the kit that person wants to see most. Personally, I would love to see a 1/48 scale kit of a Convair B-36 Peacemaker. I'm not sure it would lead to worldwide economic recovery and long-term prosperity in the modeling manufacturing industry. I don't even want one for myself. I just want to see it!

Others may request kits with a brighter future in the industry (although I don't see how anything could be more popular than a Peacemaker the size of my car). Some may even choose subjects that are already on the drawing boards of a major kit maker.

But two things are certain: Anyone reading this is encouraged to let us know that kit which you want to see most. The other thing: When *FSM* readers speak on this subject, manufacturers listen. Each time we've conducted this survey we've published the results – and many of the most-requested kits actually have appeared, thanks to our readers.

## How it works

Without a lot of forethought, think of which single kit you'd like to see most. Then, visit our Web site, www.FineScale.com, and on the home page you'll be able to take the survey. Follow the directions – please, don't forget scale – and then submit your druthers.

## Are there rules? Of course there are rules!

✓ No reissues – new kits only

✓ Stick to injection-molded plastic kits – no resin kits or accessories, detail packages, decals, conversion sets, etc.

✓ Be reasonable: Try to think of something that actually might be popular (Dang! There goes my Peacemaker) and marketable

✓ No crusades, no campaigning: If our survey numbers look funny, we will notice (on most days, anyway). Please don't stuff the ballot box. You're on your honor here.

So, there you have it. This is your chance to sound off. We'll publish the results of the survey in the September 2010 *FSM*. In the meantime, come visit FineScale.com and tell us what you want. We look forward to hearing from you! **FSM**

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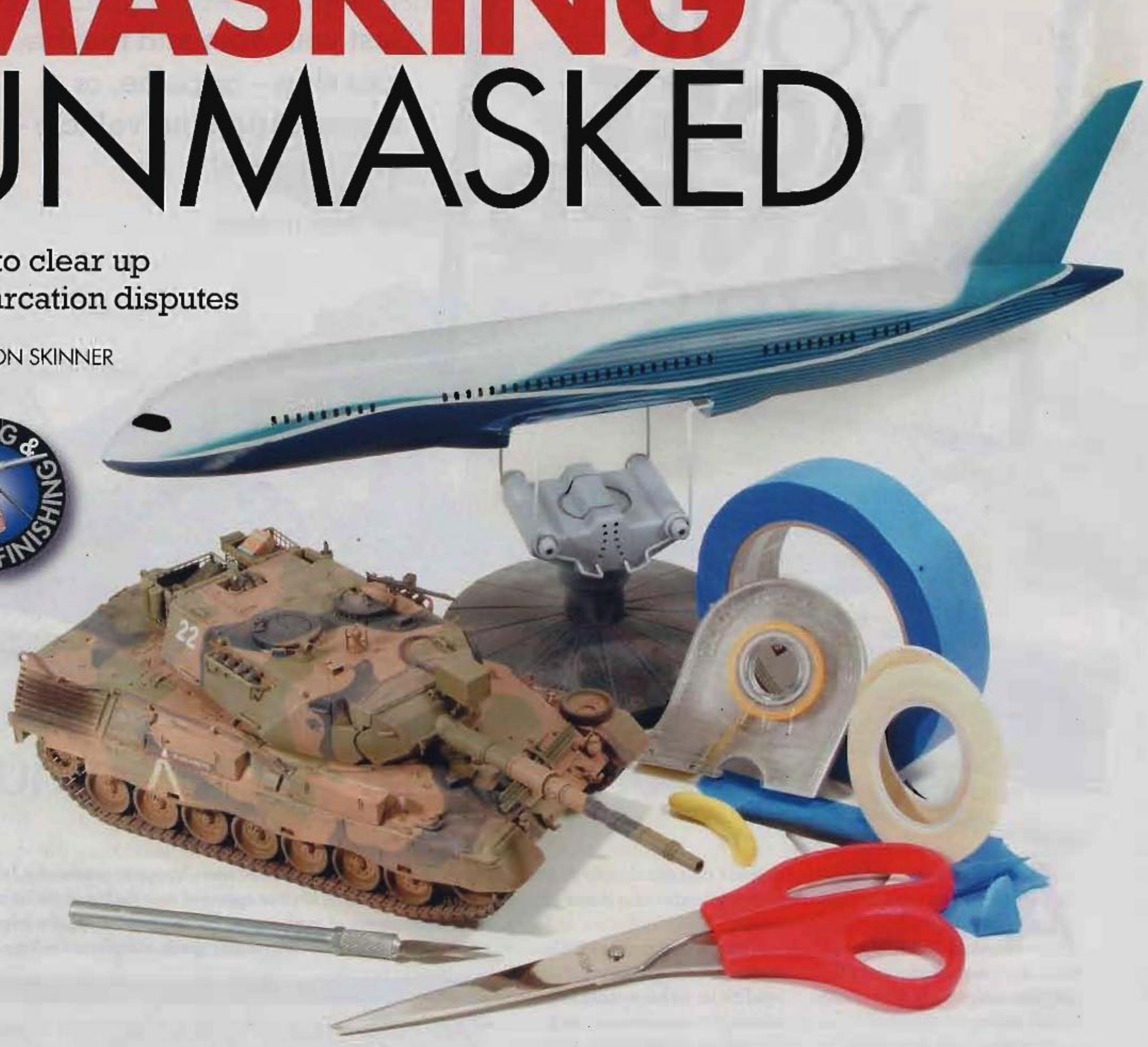
See how *FSM* surveys may have influenced kit manufacturers in the past to give modelers what they wanted!

# MASKING UNMASKED

## How to clear up demarcation disputes

BY AARON SKINNER

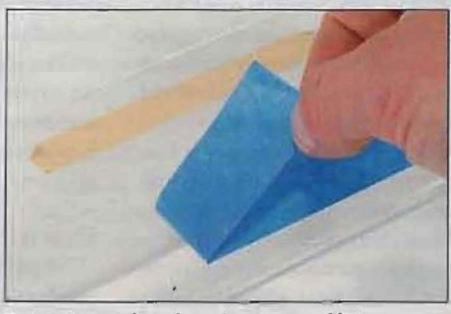
AIRBRUSHING & FINISHING



No matter how long you try to avoid the issue of multicolor paint schemes, sooner or later you will need to apply masks to keep the paint where you want it. Masking comes in many forms, and a variety of techniques can net different results depending on what the model calls for.

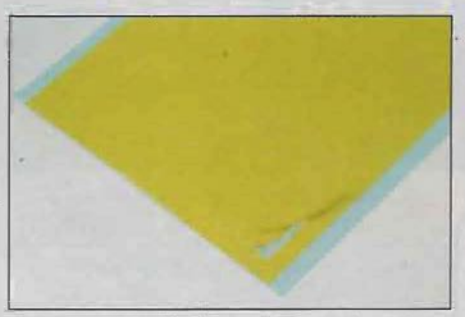
This short primer will look at several different ways of masking, but it is by no means comprehensive. If you use a technique that isn't shown here, drop me a line at askinner@finescale.com under the subject line "Masking Ideas." I'll feature the most interesting and innovative suggestions in our Reader Tips column.

The original masking material, painter's masking tape, has been used by modelers for years. It's available from several manufacturers in many types and widths. Because model paint is thin and delicate, look for a low-tack brand like 3M's blue tape to reduce the chance of paint being lifted when the tape is removed.

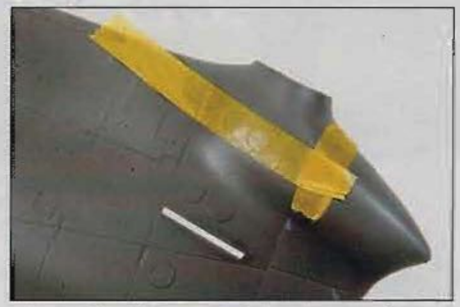


Painter's tape has the advantages of being widely available and relatively cheap. To reduce the tackiness of the tape and make it more friendly to model paint, place strips sticky-side down on a smooth, flat surface (glass is ideal) and peel it off a few times. This should reduce the adhesiveness considerably.

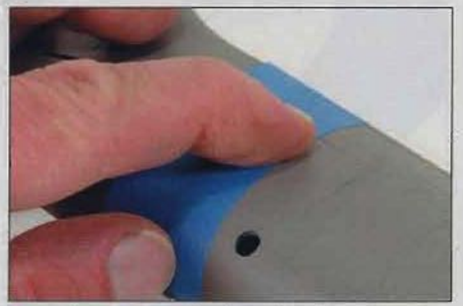
Some masking tapes are made especially for models. My favorite is the very thin paper tape sold by companies like Tamiya and Gunze Sangyo. Its flexibility helps it follow surface contours, and its thinness leaves a clean edge.



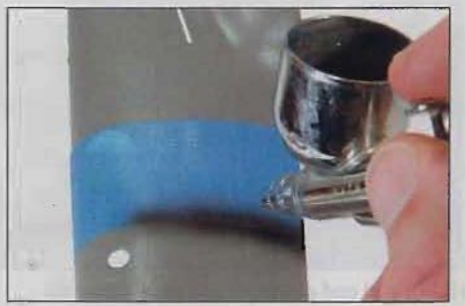
Gunze Sangyo sells sheets of thin masking tape in precut strips that are easy to use; just cut the length you need and lift the tape from the backing paper. The machine-cut edges can be straighter than if you cut your own strips.



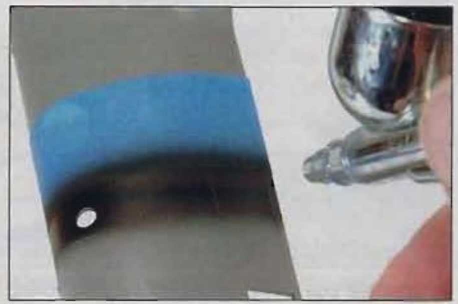
Tamiya's flexible tape easily bends around complex curves and shapes. I also like that the thinness makes it easy to see where the tape is sticking and where it's not. This is a great help in ensuring a good seal.



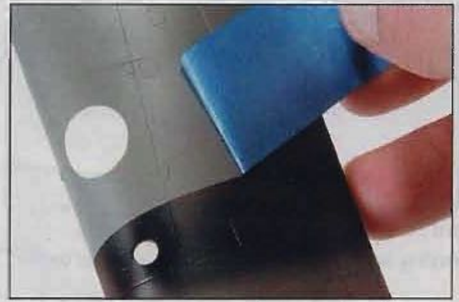
To apply a tape mask, place the edge of the tape where you want a paint demarcation line and burnish it with a finger. Don't push the tape down too hard except along the edge; the more the tape sticks, the greater the likelihood of paint peeling when you remove the tape.



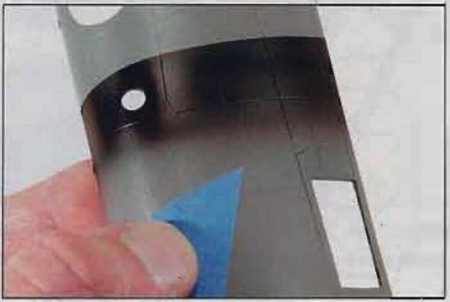
When spraying a masked area, I start by spraying a thin light coat along the tape edge. This dries quickly and helps prevent paint from bleeding under the tape. On complex schemes, like the ZTZ-99B on the cover, spraying a light coat of the underlying colors seals the masks.



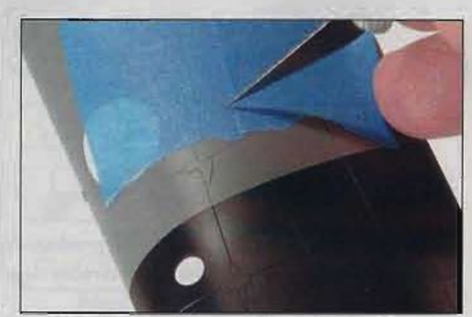
Then, I airbrush paint into the large areas, avoiding heavy applications near the tape. This prevents buildup along the tape and minimizes the chance of paint seeping under the tape.



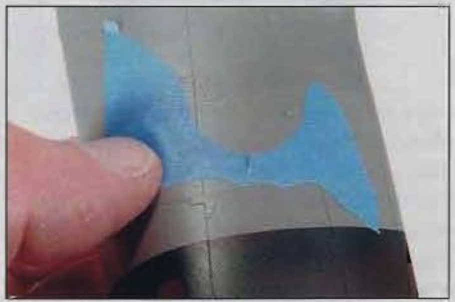
As soon as the paint is touch dry (unless there are more colors to be added), I remove the tape. Wait too long and the paint will set hard and be more likely to chip when you remove the mask. Work slowly, peeling the tape off by folding it back on itself at a slight angle to the tape line to avoid damaging the edge or underlying paint.



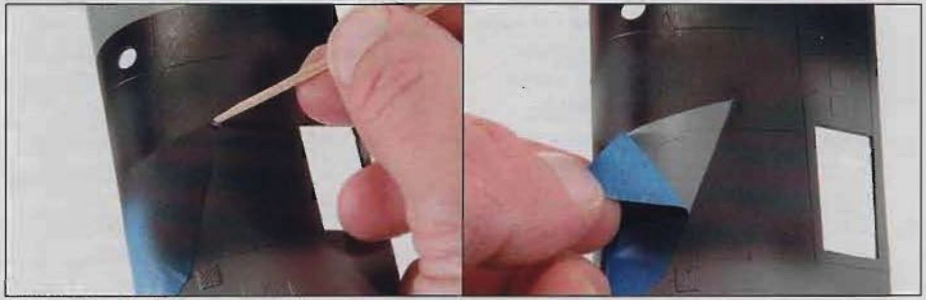
Masking tape is easy to cut to shapes, either off the model, as in this pointed piece replicating splinter camouflage ...



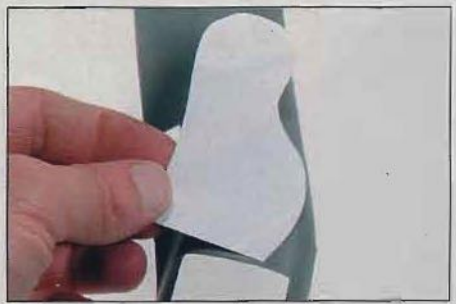
... or on the model. Here, I have applied tape and am using a brand-new No.11 blade to cut a curve into it. It is possible to trace a camouflage pattern onto a model covered in tape and cut out the mask. The same could be done with frisket, a clear masking film available from art-supply stores.



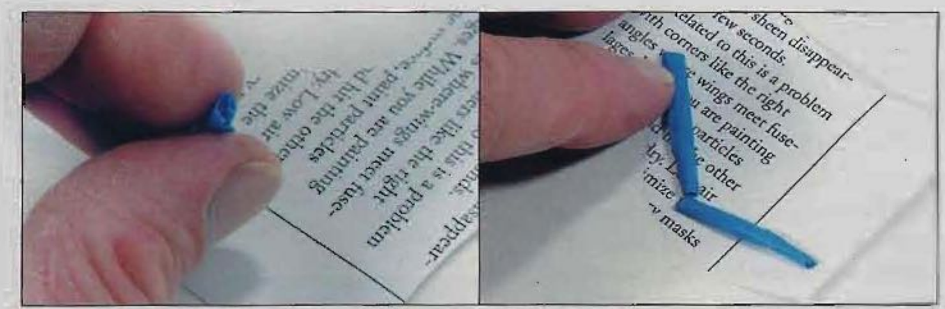
After cutting, it's a simple matter of peeling the unwanted sections of tape from the model.



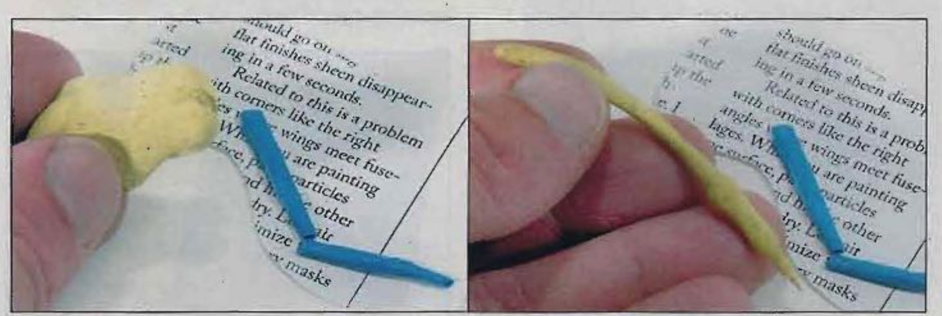
After painting, a toothpick is ideal for removing masking tape or film from the surface without scratches. Simply push the toothpick's end gently against the edge of the tape until it begins to rise (left), then peel it off with tweezers or fingers (right), avoiding direct contact with the fresh paint.



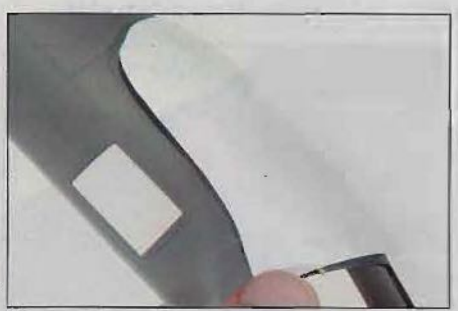
**All of these techniques are great for creating sharp-edged lines. But what about softer transitions between colors? The easy thing to do is cut the shape you need from scrap paper ...**



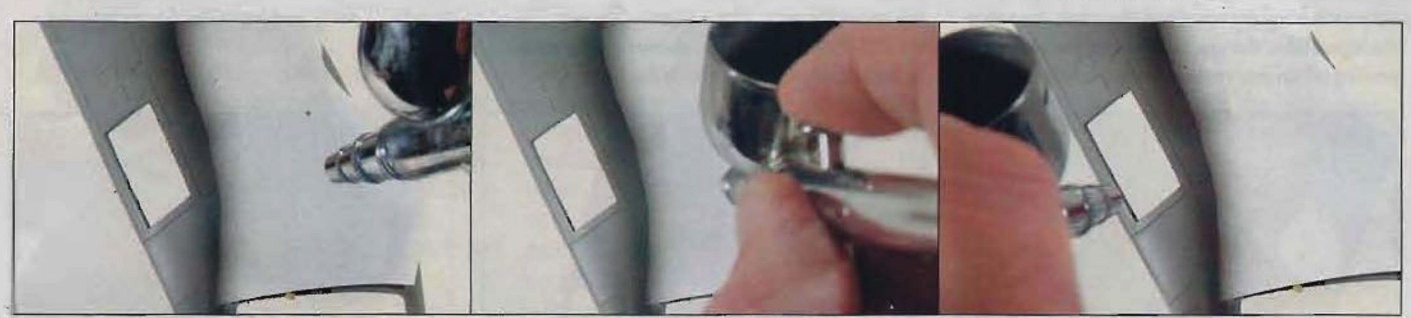
**... then roll thin tubes of masking tape (left) and attach them under the edges of the mask (right).**



**Alternately, you can use poster putty (left), rolling it thin (right) and pushing it into place under the paper mask.**



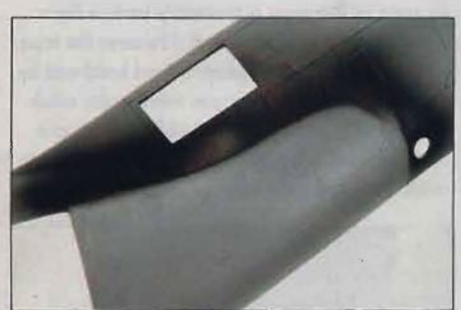
**Now, when you place the mask on the model, its edges will be slightly raised. This gap will allow a little overspray to filter under the mask, giving the painted area a soft edge.**



**The angle of the brush to the mask will produce different edges. Spraying from over the mask back toward the edge will give less overspray and a sharper edge (left). Angling the brush directly down gives more overspray and a softer edge (center). Spraying back at the mask forces more paint under the mask, producing a very soft line (right).**

## Masking tips

- To prevent bleeding, spray the underlying color or clear over the mask edges before adding the new color. That seals the tape and is invisible on the model.
- To limit damage to paint, score the edge of the masks with the point of a new No.11 blade before peeling the tape. This should prevent the surrounding color from coming off with the tape.
- Surface preparation is the foundation of any good paint job. Poor paint adhesion increases the chances of paint coming off with the tape. Wash parts with mild dish detergent and use rubbing alcohol or Polly Scale Plastic Prep before a painting session.
- Experiment! I've touched on basic techniques here. The pages of *FSM* are filled with innovative masking agents: salt (July 2003 and November 2008); Parafilm M (February 1993); Vegemite (February 2008); and my personal fave, Silly Putty (July 2003 and April 2006), to name a few. You can order back issues at FineScale.com or by calling Kalmbach customer service at 800-533-6644.



**Here are the results of the above paint applications using a raised-edge mask. For greater control, you can use tape with its edges raised. Spray a couple of passes along the tape to produce soft edges, then push the tape down before finishing the rest of the painting. This limits the amount of paint that goes past the mask. FSM**

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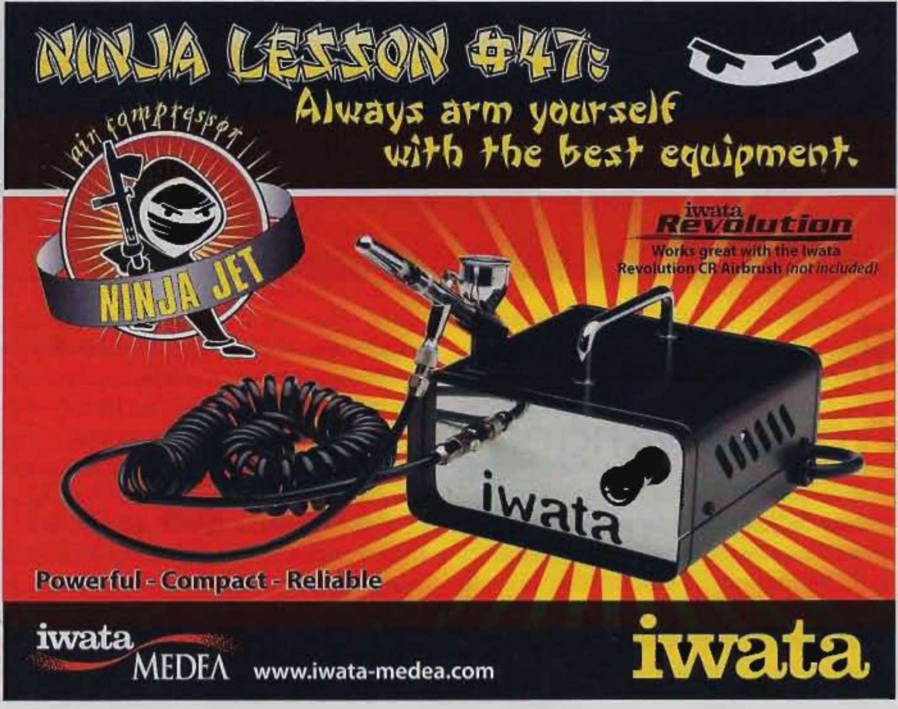
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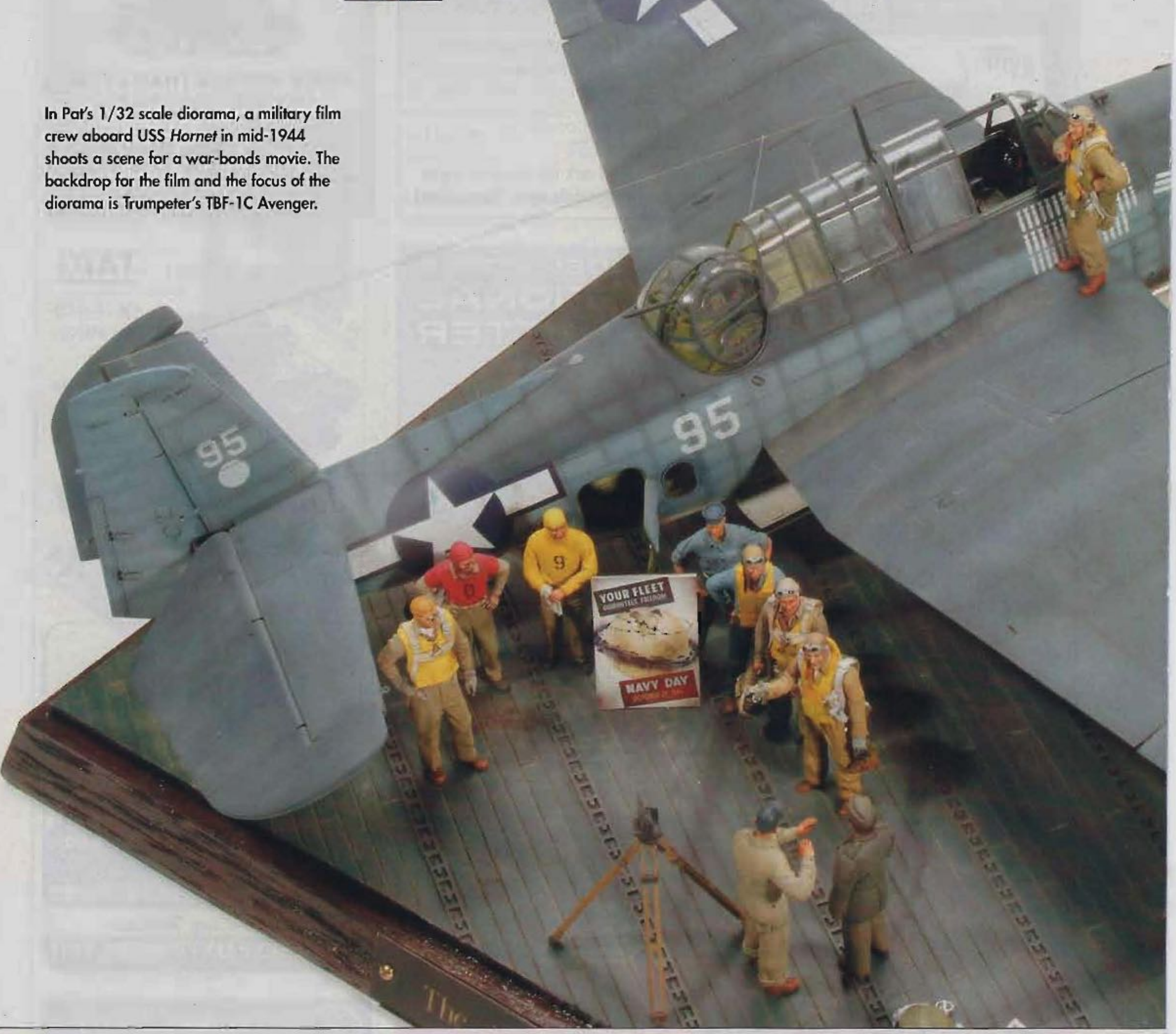


**In Pat's 1/32 scale diorama, a military film crew aboard USS *Hornet* in mid-1944 shoots a scene for a war-bonds movie. The backdrop for the film and the focus of the diorama is Trumpeter's TBF-1C Avenger.**

# Figures and base flesh out story around a World War II Avenger

Trumpeter's 1/32 scale Grumman Avenger is the centerpiece of Pat Hutchens' World War II diorama – but the figures make the scene fly.

A fan of large-scale U.S. Navy aircraft, especially Grumman's big torpedo bomber, Pat was looking for an appropriate display when a morale poster and movie camera from Verlinden gave him the idea of a shipboard film set for a war-bonds drive.

Describing Trumpeter's TBF-1C as a straightforward build, Pat worked pretty much from the box. The kit fits well when care is taken to sand, scrape, and test-fit parts before gluing, he says. His only additions: replacing the inaccurate wing guns with brass tube, and wiring the gun camera forward of the windscreen.

He painted the aircraft with Model Master enamels sprayed with a Paasche VL airbrush. Painting started with a base coat of flat sea blue post-shaded with lighter tones. Next he applied the intermediate blue and post-shaded it. For the white

A pilot stands ready to show off the Avenger's cockpit. Pat finished the big Grumman virtually straight out of the box, adding only brass-rod wing-gun barrels and wiring for the gun camera. Patience is the key to finishing a big model, according to Pat. "Alternate between the easy and complex areas," he advises.

YOUR FLEET
GUARANTEES FREEDOM
NAVY DAY
OCTOBER 27 1944

Crewmen get direction for a scene in a 1944 war-bonds drive short promoting Navy Day. The men are a mix of modified Verlinden, Ultracast, Andrea Miniatures, Reheat, and Nemrod resin figures.

underside, Pat applied gull gray, then post-shaded with white. He used E-Z Masks (www.ezmasks.com) on the canopy and turret.

He marked the airframe with kit decals applied between coats of Pledge Future floor polish. After washes of raw umber and Payne's gray artist's oils, he sprayed Testors Dullcote. The final weathering touch was a rub of gray and white pastels.

For the film crew and "stars," he combined figures from Andrea Miniatures, Nemrod, Reheat, Verlinden, and Ultracast, swapping heads for a little variety. He colored the figures' uniforms with a combination of Humbrol, Model Master, and Tamiya paints. Artist's oils were used on the flesh.

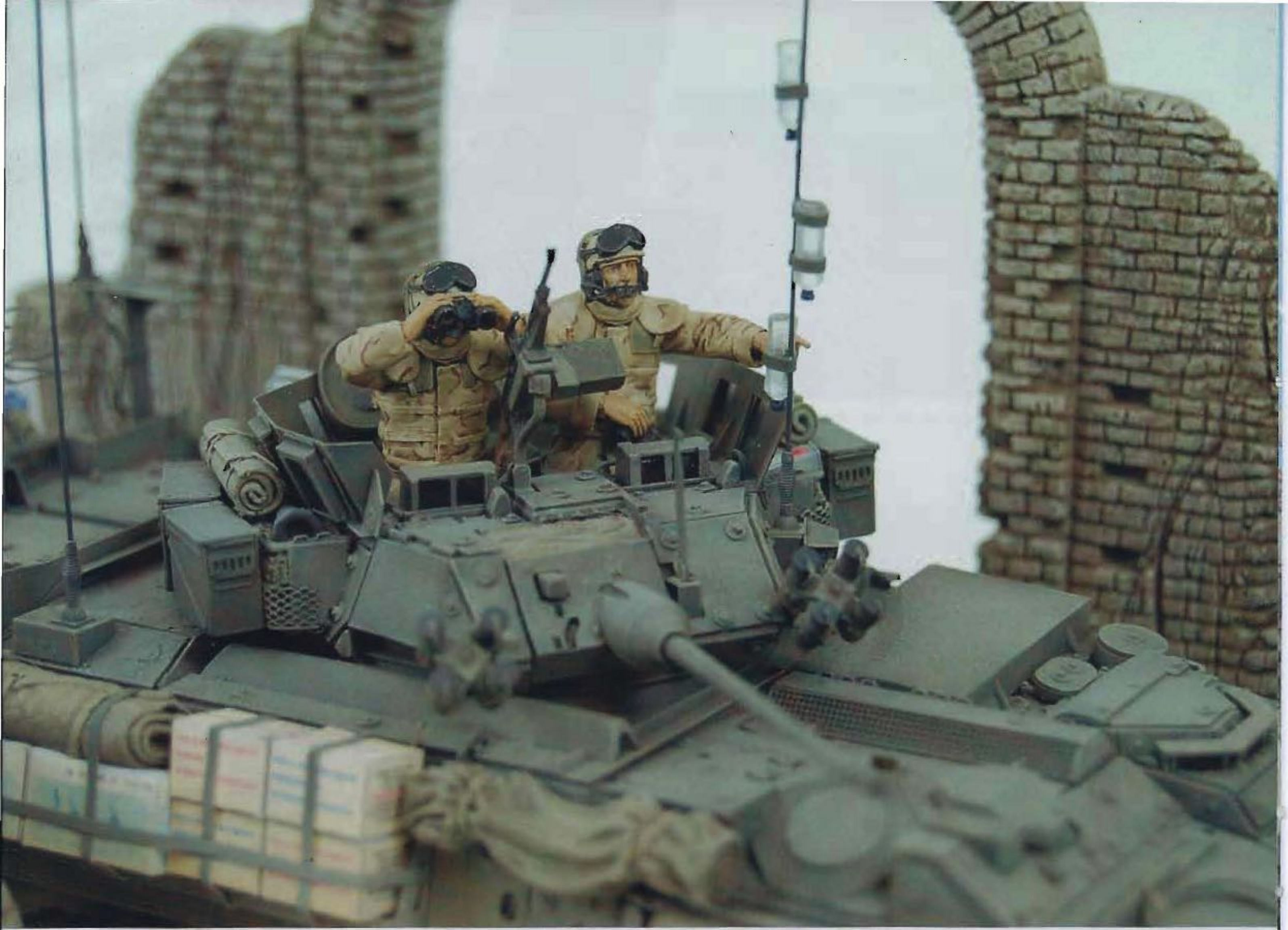
To base the diorama, Pat chose a resin carrier deck from Just Plane Stuff and painted it with Polly Scale and Tamiya acrylics. The Moto-Tug was scavenged from a 1/32 scale Trumpeter Hellcat kit.

Pat, a Portsmouth, Ohio, police detective, was 4 years old when he built his first model, "probably an Aurora Frankenstein," he recalls. Nowadays, he's narrowed his focus to "almost anything military, with an emphasis on U.S. subjects."

He prefers to build straight from the box, but uses resin and photoetched metal on occasion. "And, of course, canopy masks," Pat says. "A great timesaver!"

Pat lives in Portsmouth with his wife, Melissa, and 16-year-old son, Andrew.

**FSM**

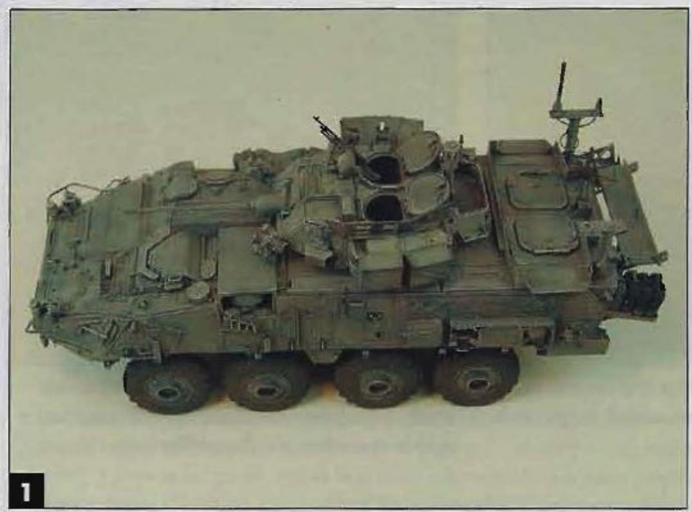

With his Canadian LAV III assembled and detailed, Jim can start painting and weathering the vehicle and add its crew.

| PART TWO |

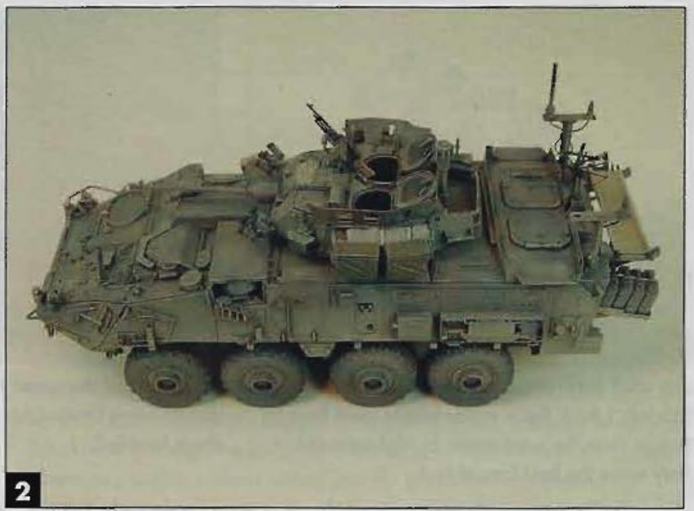
# Finish a Canadian Forces LAV III

## Painting, weathering, and final details

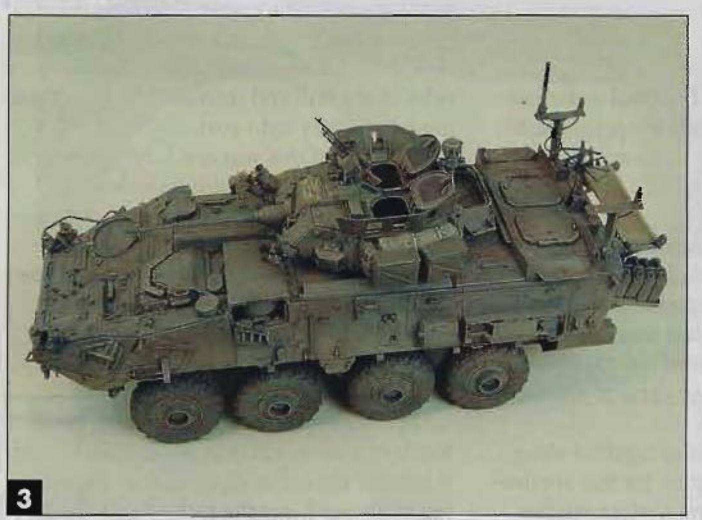
BY JAMES WECHSLER


**1**

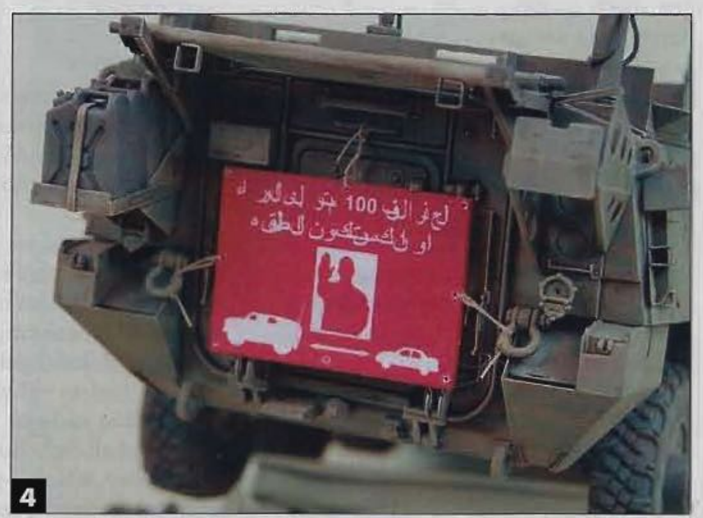
With its heavy load of photoetched parts, Jim primed the model with Testor Model Master Flat Gull Gray. Next he painted the tires and added the overall coat of Olive Drab.


**2**

Jim built up a layer of dust on the model by spraying a heavily thinned (about 20 percent paint to 80 percent thinner) mixture of Tamiya Buff and Tamiya Thinner.


**3**

Next, Jim gave the whole model a wash using thinned Raw Umber oil paint from Windsor & Newton. He thinned the paint with Mona Lisa Odorless Paint Thinner.


**4**

How cool is this? You don't often get to add a big red "Stay back" sign to your armor models, so Jim couldn't resist.

With the LAV's construction and detailing out of the way, I was really looking forward to painting and weathering it. I started out by giving the model a coat of Testor Model Master Flat Gull Gray enamel as primer. I don't normally use a primer, but with so much photoetch installed it seemed like a smart move. I'm not sure what it is about gray, but it seems to cover much better than any other color.

I painted the tires using Model Master Acryl U.S. Army Helo Drab. It's a dark gray that to my eye looks a lot like old, dirty rubber. I painted the rest of the model using Model Master Flat Black enamel. Afterward, I did some panel fading, first with Model Master Olive Drab, then with a light dusting of Model Master Faded Olive Drab.

At this point, the model looks notably more washed out than a clean, factory-fresh LAV would. This is intentional. For me, painting is the beginning of weathering. When I look at the photos of LAVs in Afghanistan, they look very washed out due to the amount of dust that's accumulated on them. That's why I went this route and started with these colors.

Next I dry-brushed the model with Model Master Afrika Dunkelgrau, which is a tan/gray color. I touched up the gray on the tires with a brush and gave the model a heavy flat coat, **1**.

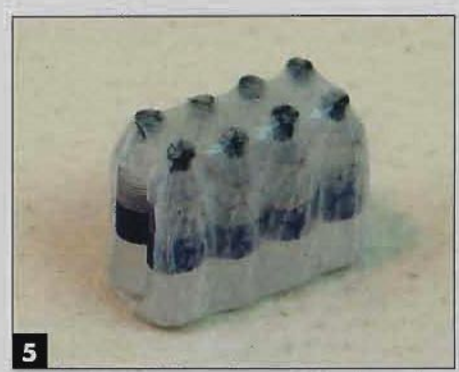
### Detail painting

The bulk of the detail painting on the model is the stowage. I painted the tarps and stretcher canvas in Model Master Afrika Khaki Braun and dry-brushed them with a lightened version of Model Master Enamel Afrika Dunkelgrau. I painted the straps with Model Master Afrika Dunkelgrau, too.

I also painted the rocket launcher in the right turret basket and the ammo cans on the outside of the stowage baskets using Model Master Green Drab. Afterward, I dry-brushed them with more Model Master Akrika Dunkelgrau.

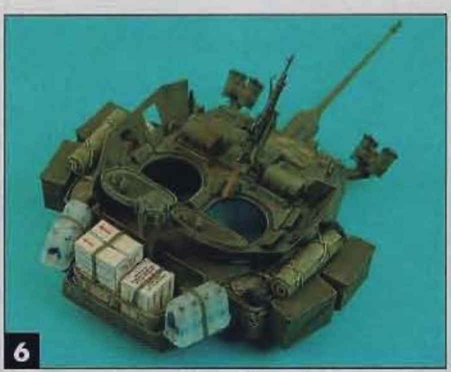
I used Model Master Metalizer Gun Metal to give the turret machine gun a base coat of paint, then dry-brushed it with Model Master Metalizer Dark Anodonic Gray. The butt of the gun is painted Dark Tan, which seems a good match for wood.

At this point the model looks pretty contrasty and looks overdone; again, that's by design. After the washing and dusting that will follow, the contrast will decrease. I wanted to start with a fairly high amount of contrast so it wouldn't fade away completely



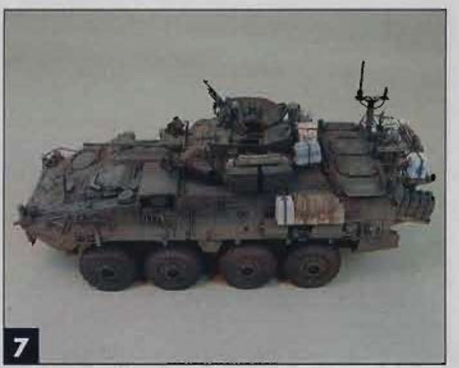
**5**

Jim used Accurate Armour's water bottle set for this job. I think these water bottles must be a bit bigger than the ones in use in Afghanistan but they were the best I could find.



**6**

Jim attached the water bottles and the rations boxes using Gator Glue then added straps made from lead foil.



**7**

Once again Jim dusted the model using an airbrush, letting the effect build up as it would on a vehicle operating in a desert-like area.

as I progressed with the rest of the weathering.

### Pre-wash dusting

Before I put a wash on the model, I wanted to add a "dusting" effect to simulate a huge buildup of dust on the lower portion of the LAV's hull and running gear. I did this by airbrushing a heavily thinned (about 20 percent paint to 80 percent thinner) mixture of Tamiya Buff and Tamiya Thinner. This has the effect of lightening the affected areas without washing out the details. I focused on the bottom of the model and worked my way up along the hull sides for this step, **2**.

After the wash, I will repeat this dusting process to extend it to the rest of the model in gradual amounts.

### Oil wash

I gave the whole model a wash using thinned Raw Umber artist's oil paint from Windsor & Newton. I like to thin this paint with Mona Lisa Odorless Paint Thinner (available at art supply stores). It's a very weak thinner; it will dilute the oil paint but it's not strong enough to attack the finish on the model. I'm not terribly careful with the dilution ratio when I mix a wash, but I'd guess it's about 20 percent paint and 80 percent thinner.

Hopefully it is visible, **3**, that the model is now not nearly as stark now that the wash has blended the colors together and given the finish a more integrated look.

### Stay back!

One of the really cool things on some of the LAVs in Afghanistan is the large red sign that's sometimes carried on the front and back of the vehicle. I don't speak the language, but I'm fairly certain they say something like "Stay back." These signs are included in the printed sheets that come with the kit. I mounted them on a sheet of .010" sheet plastic that I also painted red.

How cool is this? You don't often get to add a big red sign to your armor, **4**, so I couldn't resist.

### Water bottles

In some of the photos I noticed water bottles in thick plastic shrink wrap, similar to what you might find in a grocery store. I was intrigued and thought I'd have a go at modeling a set.

I bought Accurate Armour's water bottle set to use for this job. I think these water bottles must be a bit bigger than the ones in use in Afghanistan, but they were the best I could find. I painted the caps blue and just used an old blue decal to simulate the marking stickers.

I glued all eight bottles together using Gator Glue, which is great for this application since it doesn't leave a white residue like super glue.

When the glue was dry, I wrapped the set in a kitchen shrink wrap that has a slightly tacky side. (My wife uses this at home, so I just scavenged a bit.) I hit it with a hair dryer until the edges shrunk up around the bottles, giving me just the look I wanted, **5**.

### Turret stowage

I attached the water bottles and the rations boxes using Gator Glue and then added straps I made from lead foil. I had to be super careful to thread them through the tiny tie-downs without ripping tie-downs from the basket, **6**. Tough work, but patience was the main skill.

### Post-wash dusting

One of the effects of the wash is to blend all of the colors together. As a result the dusting I did previously faded slightly, so I repeated the process with a couple of changes.

Once again I used Tamiya Buff thinned with Tamiya Thinner. I focused on the underside again, but this time I made sure to avoid the wheels. Later, I'll add pigments to them, and I don't want to lighten them up too much before that step. I continued to add the thinned Buff mixture up the sides of the hull and then covered the entire model in a very light coat.

Once all of this was dry, I did another round of dusting with similarly thinned Tamiya Deck Tan. It's a lighter color than Buff and makes a nice complement in the dusting process. Again, I focused mainly on the underside of the hull and avoided the wheels. I didn't go too far up the hull sides since I wanted to control the amount of lightening.

My main goal in this step was to get as much of a dusty effect as possible so I could minimize the use of pigments, **7**. Pigments can really wash out the look of a model and after installing nine sheets of photoetch that was the last thing I wanted to happen!

### Pigments

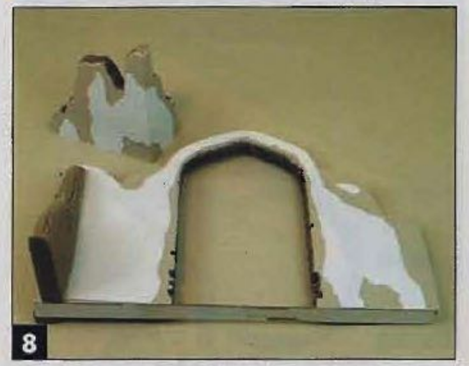
I limited my use of pigments to the lower hull and the wheels. I used a mixture of Mig pigments and applied them dry using a large brush and an eye-liner sponge (from the cosmetics department).

I wrapped up the model construction by adding the antennas. I added the three upside-down water bottles to the turret antennas; I believe these are used to hold a special infrared glowstick for vehicle identification.

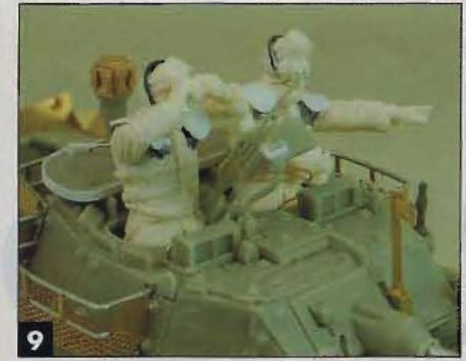
### Base layout

Originally, I thought I'd make a simple base with just some flat groundwork. But then I realized I had Verlinden's "Desert City Ruined Gateway" (No. 1786). As configured in the set, it's quite long, so I cut it in half.

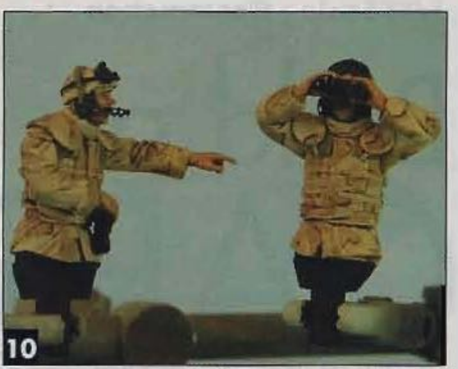
The problem with the Verlinden set is that there's no detail on the back of the


**8**

Jim cut apart a Verlinden scenery set and added detail using brick and stucco sheets from Plastruct. White glue helped fill any gaps.


**9**

Jim couldn't find any commercially available Canadian tankers, so he studied his references and subtly converted a couple of Marines.


**10**

Unlike many figure modelers, Jim used Model Master enamels to paint his tankers. A wash of artist's oil paint finished the job.

gateway. I wish I had epoxy-sculpting skills, but I don't. Instead I bought some Plastruct brick and stucco plastic sheets. I love this stuff because it's inexpensive, and since it's styrene it's easy to use. First I cut out the bricks to match the wall contours. Then I cut out some of the stucco and trimmed it to look like it had been partially knocked off the walls, **8**.

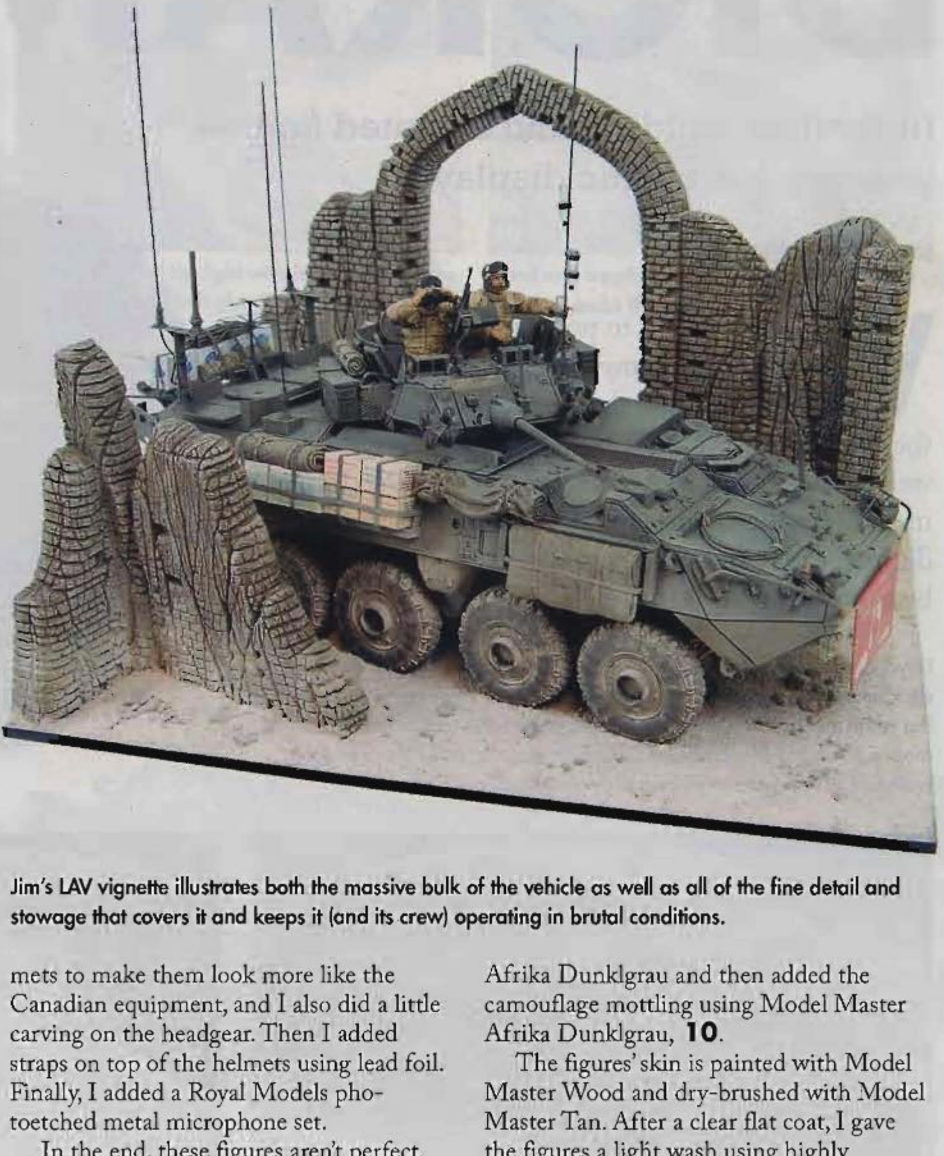
I glued everything together and trimmed and puttied where the bricks met the resin parts. I used a knife to add notches and nicks. I saw no need to be super careful.

I shaved the edges of the stucco to give them a blended look and put a thick coat of white glue along the edge of the stucco and bricks to make sure there weren't any gaps.

### Finishing the base

With the wall rework done, I painted the walls Model Master Afika Khakibraun. I then dry-brushed them with Model Master Afika Dunkelgrau. I painted the stucco areas using Model Master Radome Tan over a Khaki base coat.

Once the paint was dry, I gave the whole thing a wash of about 20 percent Windsor & Newton Raw Umber oil paint and 80 percent thinner. I followed this with another dry-brushing of the Khaki areas using a lightened version of Model Master Afrika Dunkelgrau.



Jim's LAV vignette illustrates both the massive bulk of the vehicle as well as all of the fine detail and stowage that covers it and keeps it (and its crew) operating in brutal conditions.

### Figures

I was disappointed to realize that there are no figure sets of modern Canadian soldiers, so I started with a set of modern Marine tankers. After comparing them to my reference photos I realized that I wouldn't be able to completely accurize the figures, so my goal was to cover the main points.

First, I added shoulder pads I made from sheet plastic. There's mesh under the pads that looks like it's attached to the shirt, so I simulated that with lead foil.

I made a small modification to the helmets to make them look more like the Canadian equipment, and I also did a little carving on the headgear. Then I added straps on top of the helmets using lead foil. Finally, I added a Royal Models photoetched metal microphone set.

In the end, these figures aren't perfect, but I think they're reasonably close to modern Canadian tankers and should be OK for this build, **9**.

### Figure painting

Again using my reference photos, I painted the figures with lightened Model Master Afrika Dunklgrau and then added the camouflage mottling using Model Master Afrika Dunklgrau, **10**.

The figures' skin is painted with Model Master Wood and dry-brushed with Model Master Tan. After a clear flat coat, I gave the figures a light wash using highly thinned Windsor & Newton Raw Umber artist's oil paint.

This has been a great model to build. Even with the extensive amount of photoetched parts I installed, I'd still deem it an easy, enjoyable project of an important piece of modern armor. **FSM**

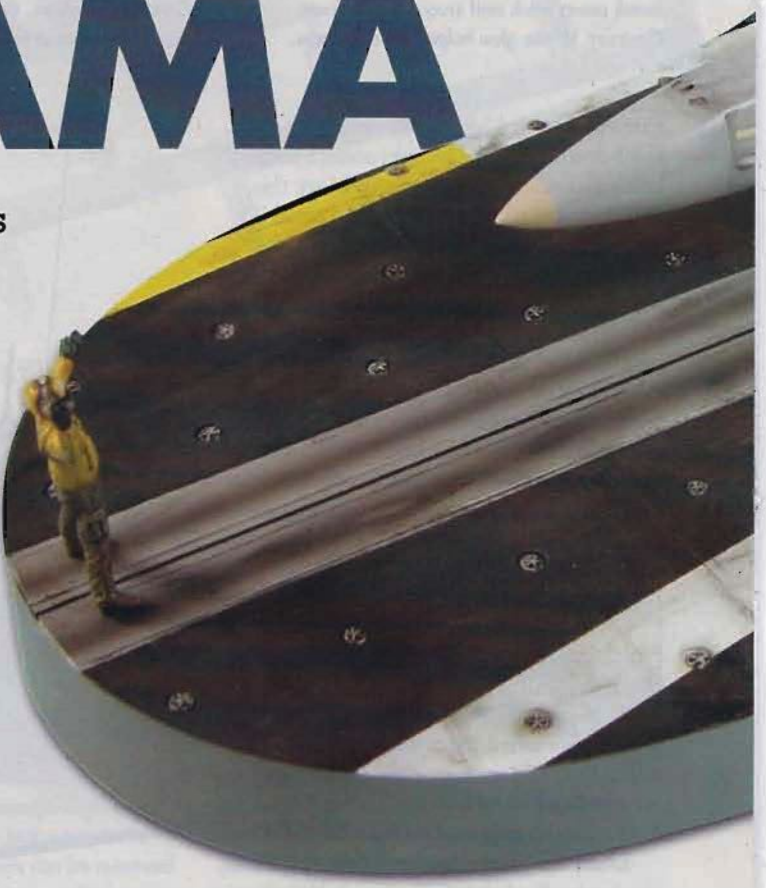
**1/32 Scale | Construction**

# Build a CARRIER-DECK DIORAMA

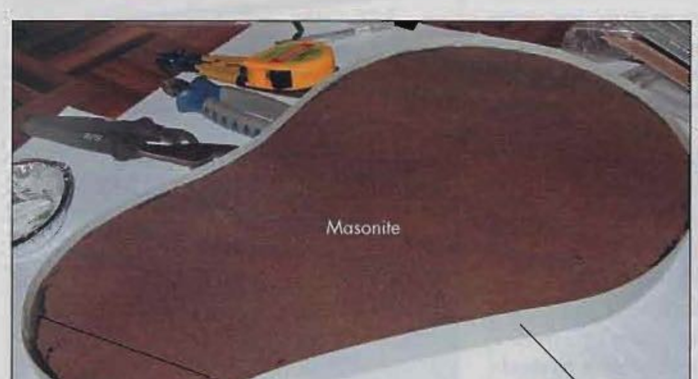
## Innovative building and sculpted figures produce a dramatic display

BY LLOYD CHIDGZEY

When I set out to pose an F/A-18C on an aircraft carrier, my plan was to build the carrier deck and use the deck crew that came with the Academy kit (No. 2191). This would have worked well enough, perhaps. However, after viewing documentaries of what goes into launching these jets, I decided the best way to capture the excitement would be to make my own figures in accurate poses.



Lloyd started with an Academy F/A-18C, then made a portion of carrier deck and sculpted his own crew. He sprayed deck markings with Tamiya flat white and yellow, masked, then sprayed a base coat of flat black automotive paint. Dry-brushing and Tamiya weathering powders provided a realistic finish. Lloyd cast individual tie-downs in resin.

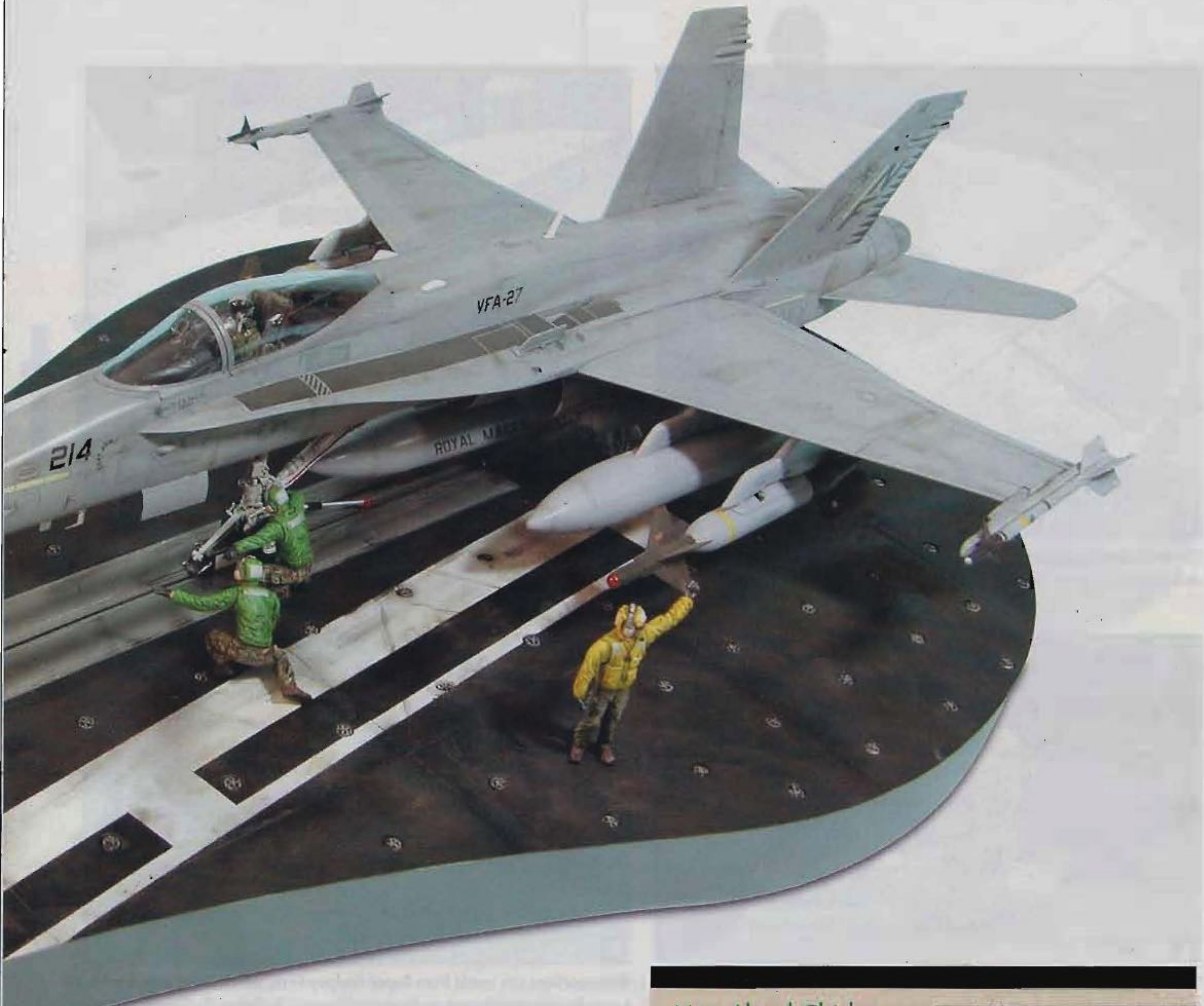


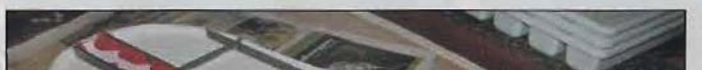
**1**

Inside a sheet-styrene border, a custom-cut piece of Styrofoam covered with a layer of Masonite board provides a base. The styrene is attached and sealed with 30-minute epoxy.

**2**

Acrylic latex exterior paint provides a smooth undercoat and further seals the base.



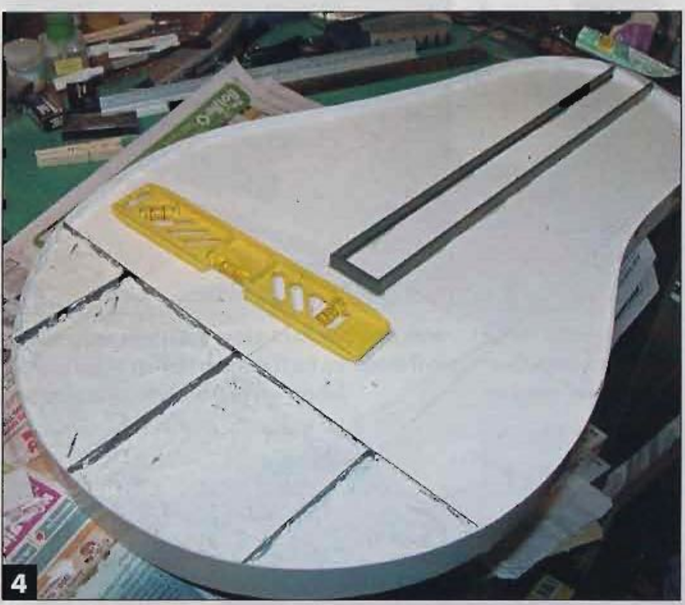


**3** Lloyd poured plaster of Paris into a grid of Plastruct beams destined to define sections of tarmac.

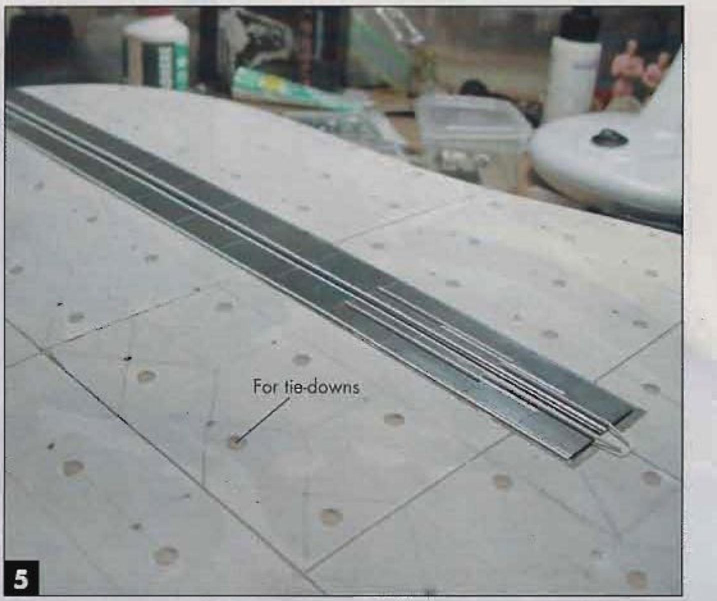
## Meet Lloyd Chidgzey

Lloyd, from Perth, Australia, built his first models in the mid-1970s – "mostly the three-color Matchbox kits back then," he says – and joined a local IPMS club in the early '80s. "In 1984 I went to university to study media design and animation," he says, "so my interest in modeling waned, although I always dabbled with the occasional kit over the years."

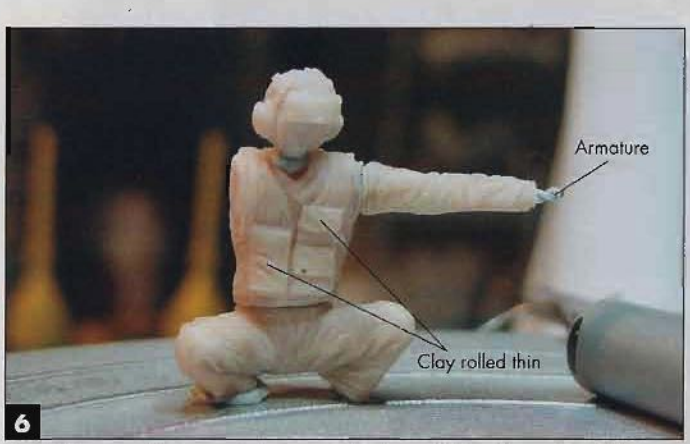
In 1991, after several years of work in commercial illustration, he moved to the United Kingdom to work as an assistant animator on a movie directed by "Roger Rabbit" animation director Richard Williams. "Following that, I went into the games industry in London, producing graphics for early (I mean ancient!) Nintendo and Playstation games," Lloyd says. He continued in the games development business for 15 years, mostly in Melbourne, Australia. "I had a great time working on some cool titles, including a world-building Jurassic Park sim game," he says. "But, as much as I like the digital medium, nothing beats getting your hands dirty and building scenes and characters from kits or sculpting from scratch."



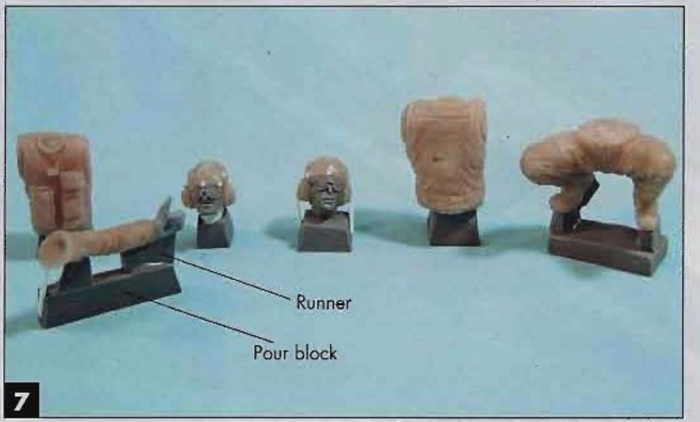
The final, leveling layers are spackle for a smooth, crack-free finish. To define deck sections, Lloyd scribed their edges.



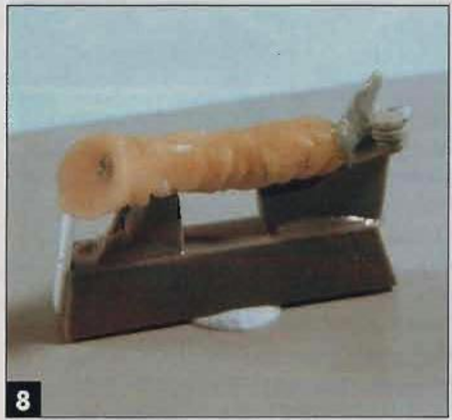
After the spackle dried, Lloyd drew a grid for a consistent pattern of holes for tie-downs. The catapult track was assembled from sheet and strip styrene, with a shuttle that actually slides on its track.



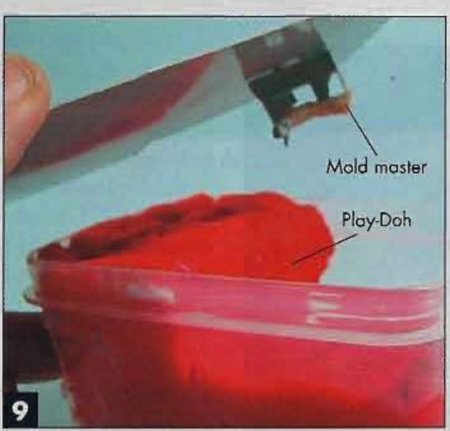
The kit figures didn't match the poses Lloyd wanted, so he sculpted his own from oven-hardening Super Sculpey, joining body parts with wire armatures. He made pockets by rolling the clay thinner and cutting it to shape. The wire armatures joining the sections made the pieces easier for Lloyd to hold while he was sculpting them.



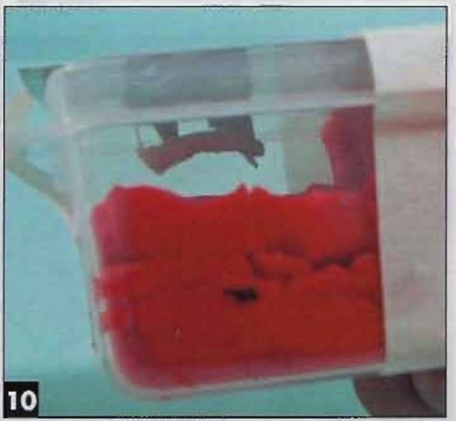
Gray portions are made from Super Sculpey Firm, which Lloyd says works better for fine details such as faces and fingers. Sculpting the figures in sections made it easier for Lloyd to mold them in silicon for resin casting. Here, the pieces are super glued to pour blocks and runners that will help carry resin where it needs to go in the molds.



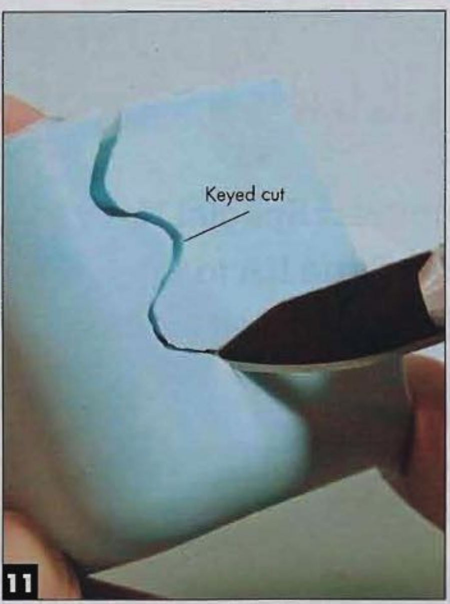
Let's see what happens to this arm: First, Lloyd glues the pour block/runner to the underside of the mold flask's lid.



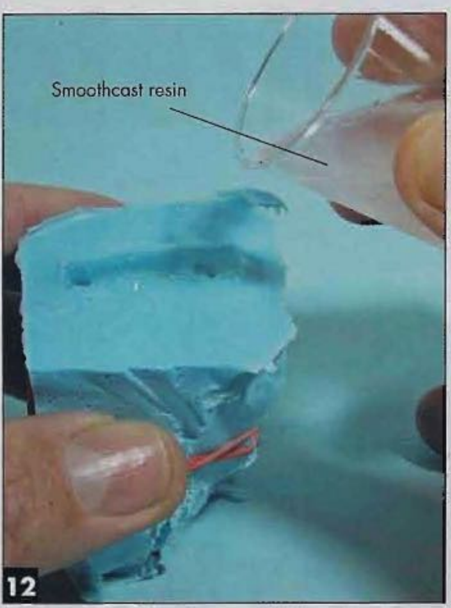
Here's Lloyd's mold flask – a plastic food-storage container. Play-Doh fills spare space in the flask, reducing the amount of silicon mold material required.



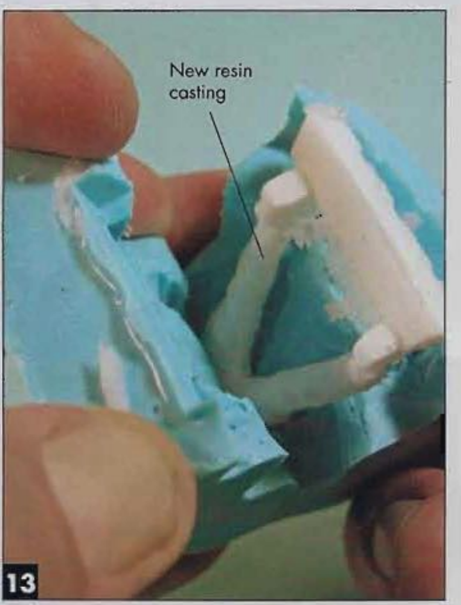
The master is situated in the flask and ready for silicon to be poured in to make the mold. Leave at least ½" space around the master piece, Lloyd advises, and pour the silicon slowly to prevent air bubbles.



After the silicon mold solidifies, Lloyd cuts it open and retrieves the master piece. The curved cut keys the mold halves so they can be realigned for resin casting.



After joining the mold halves (holding them together with a rubber band), Lloyd pours Smoothcast resin into the mold. Cure time is about 7 minutes. "There are faster-curing resins, but I prefer having more time," Lloyd says. "I pour in a small amount of resin and work it into the cavities with a toothpick, then gradually fill to the top of the pour block."



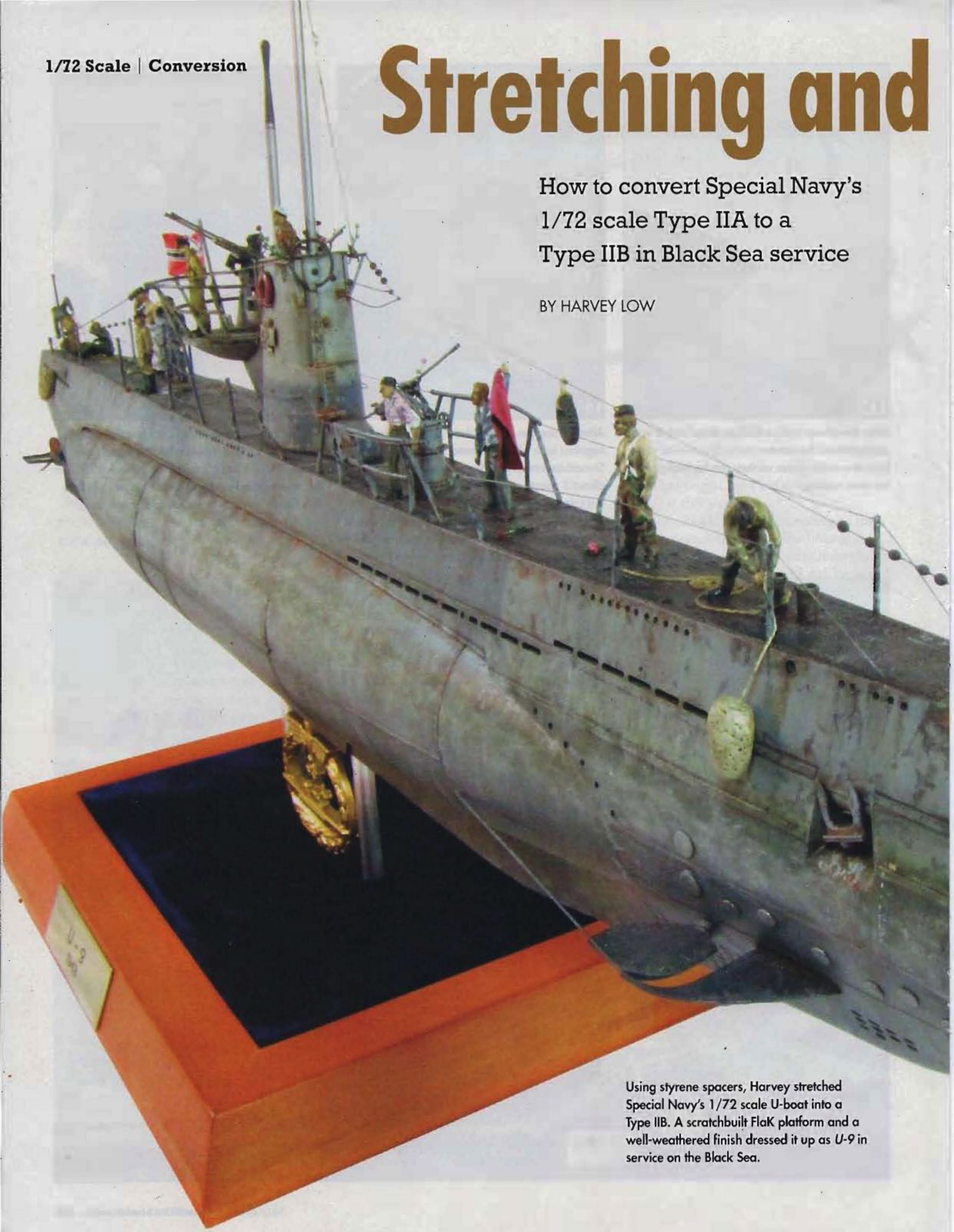
Well, it started as an arm ... it's another casting, of course, but this shows what the cured resin looks like as it emerges. The pour block will have to be sawed off and feet sanded smooth before this figure is ready to spring into action ...

....but, before long, Lloyd's crew is ready to help hurl his big F/A-18C skyward! **FSM**

# Stretching and

## How to convert Special Navy's 1/72 scale Type IIA to a Type IIB in Black Sea service

BY HARVEY LOW



Using styrene spacers, Harvey stretched Special Navy's 1/72 scale U-boat into a Type IIB. A scratchbuilt FlaK platform and a well-weathered finish dressed it up as *U-9* in service on the Black Sea.

# painting a little U-boat

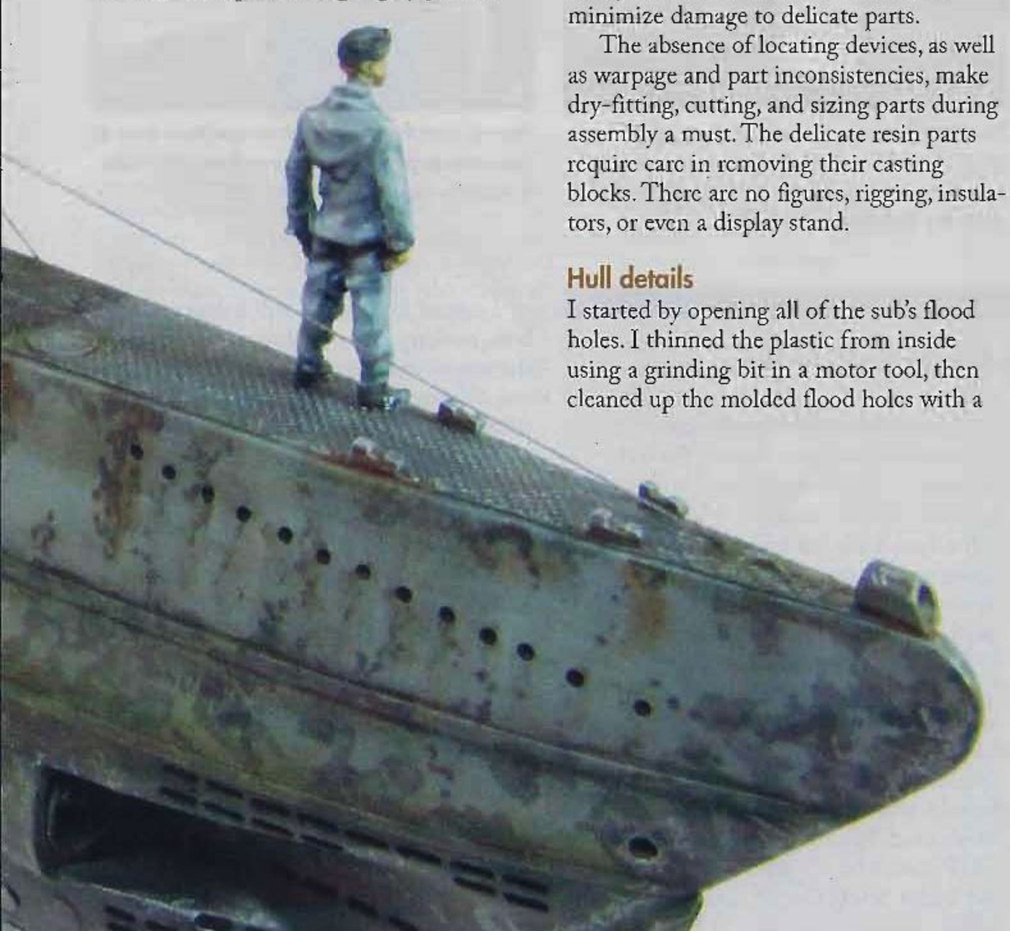
With most projects, I try to build something "a little different." When I got my hands on Special Navy's 1/72 scale Type IIA U-boat, I opted to convert the model to a Type IIB. The Type IIA is an interesting subject, but the six built saw limited service. In contrast, 20 Type IIBs were commissioned, and the boats saw extensive service early in the war when the Kriegsmarine had a shortage of subs for offensive operations. That meant more options for finish and camouflage. It also meant I had more work to do.

## The kit

Special Navy's 120-part, multimedia kit contains five sprues of light gray plastic, with high-quality resin for the deck-gun base, bollards, conning-tower eagle crest, and propeller screws. The manufacturer cast the anchor, railings, stanchions, and bridge hatch in white metal, while the attack and control-room periscopes are turned aluminum. A small photoetched-metal fret includes bridge and hull details, conning tower side-grates, and hull name plates Finally, beautifully printed decals provide markings for three boats: *U-1*, *U-6*, and two different versions of *U-3*.

The subject is unique, but the kit is definitely not for the faint-hearted. Typical of limited-run kits, flash and seams are very apparent. Parts attach to sprues with thick tabs requiring careful removal – I used a rotary-tool cutoff wheel a few times to minimize damage to delicate parts.

The absence of locating devices, as well as warpage and part inconsistencies, make dry-fitting, cutting, and sizing parts during assembly a must. The delicate resin parts require care in removing their casting blocks. There are no figures, rigging, insulators, or even a display stand.



## Hull details

I started by opening all of the sub's flood holes. I thinned the plastic from inside using a grinding bit in a motor tool, then cleaned up the molded flood holes with a No. 11 blade. (Note: Flood hole arrangements varied among boats, so check your references.) For *U-9*, the boat I was modeling, I eliminated some of the flood holes near the stern, filling with putty and sanding them flush. There are a bunch of circular free-flood holes just beneath the deck and around the bulge. I marked them from references and drilled them out with a bit in a pinvise.

A sub's pressure hull is smaller in diameter than the external hull. The excess space houses piping and machinery that is visible through the flood holes, so I employed a little gizmology and added spares-box bits and pieces. I wasn't after accuracy, but rather effect, gluing random parts to styrene-sheet supports so they can be seen through the flood holes, **1**. I sprayed the inside of the hull black.

I assembled the torpedo section (parts B1, B2, and B3) on one side of the hull, painted it medium gray, and weathered it, leaving one of the torpedo doors off and inserting a torpedo, **2**. I punched styrene disks and attached them near the bow to model missing sonar equipment, **3**.

## Stretching the hull

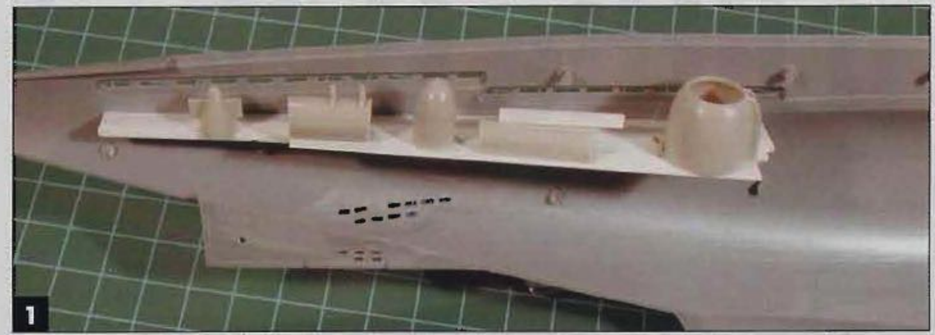
Next came the conversion's major step – lengthening the hull! Because the hull comes in four parts, it is easy to extend it between the front and rear halves. The Type IIB was 140' (42.7 meters) long, a full 6' longer than the Type IIA. In 1/72 scale, this makes the Type IIB roughly 23" (593mm) long. So I needed to add 1" (about 25mm) to the hull.

First, I added styrene support shims to the inside edges of parts A1 and A2, matching the locating shims on parts E1 and E2. These shims provide strength for the join.

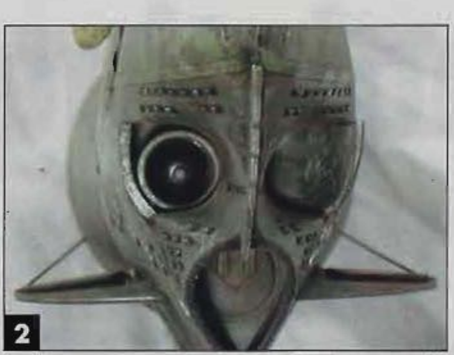
I cut 1"-wide (25mm) strips of .015" (.4mm) and .010" (.25mm) styrene sheets, **4**. Then I held the strips in hot water and bent them to conform to the hull's shape, **5**. I laminated two pieces of .015" with one .010" to make them as thick as the hull, then glued them to the shims on the front hull, **6**, and attached the rear hull sections.

To reinforce the hull, I added strips and thick styrene braces inside the joins, **7**.

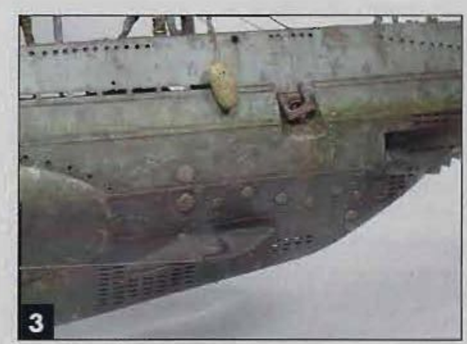
I used Evergreen styrene half-rounds (No. 240) and strip (No. 100) to extend the surface details – weld seams and panel lines – across the extension, **8**.



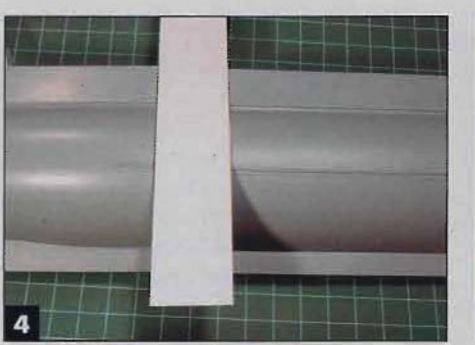
A study in gizmology: After opening the hull's flood holes, Harvey equipped the area atop the pressure hull with bits from his spares box, including an aircraft cowling and parts of a bomb.



After attaching the torpedo bay assembly to one hull half, Harvey painted and weathered the tubes and doors. As seen in this image, he left one door off, loading the tube with the nose of a 1/72 scale aircraft bomb to depict a torpedo.



Harvey punched styrene disks to replicate sonar devices near the U-boat's bow, painting them a dark metallic shade as seen in this photo of the finished model. Note also the tiny flood holes near the deck and around the saddle tanks.



To stretch the hull a scale 6', Harvey cut 1"-wide strips of .015" and .010" styrene. Laminating two of the .015" with one .010" piece created a piece the thickness of the hull.

Harvey bent the laminate strips and held them in hot water to permanently curve them and make it easier to mount them on the hull.

## A brief history of Type IIB U-boats and *U-9*

**LAUNCHED IN** the mid-1930s, Type II U-boats – the smallest German submarines to see combat – were referred to by crews as *Einbaum* ("dugout canoe") because of their narrow width and short length. These subs rolled heavily in rough seas, could not dive as deep as other U-boats, had a short range, and very cramped living conditions.

Armament was limited to three forward-firing torpedoes and a 20mm deck gun. Storage of more torpedoes inside the pressure hull only exacerbated the 20-30-man crew's overcrowding. The boats carried provisions for three-to-four-week patrols, but frequently returned to port early after expending torpedoes. They were better suited to coastal or shallow-water operations.

Their size, however, made them hard to see, and they were very maneuverable and quick to dive.

For increased stability, the sub was stretched to produce the Type IIB by adding three compartments amidships. Additional diesel tanks beneath the control room meant the boats could cruise up to 1,800 nautical miles at 12 knots.

The Type II U-boats had a few successes early in the war, and most of the survivors of these "Happy Times" were relegated to training duties. In May 1942, German workers dismantled six Type IIBs, including *U-9* (the subject of my build) and secretly transported them 2,000 miles by raft, rail, and truck to Constanta, Romania. After reassembly, the subs operated against the Soviet navy's Black Sea fleet.

*U-9* completed 13 patrols in the Black Sea before Soviet aircraft sank it in August 1944.

The Soviets raised the boat in 1945, took it to the Ukrainian city of Mykolaiv. After repairs, the sub was commissioned TS-16, but served briefly before being broken up in December 1946.

*– Harvey Low and Aaron Skinner*

I started joining the hull halves at the bow, working aft, using lots of clamps along the way to counteract warping. The left hull was 1.5mm longer than the right, so I trimmed the rear before reattaching it.

The rear-hull misalignment caused a mismatch in the weld seams that cross the keel. I sanded off those seams and replaced them with stretched sprue.

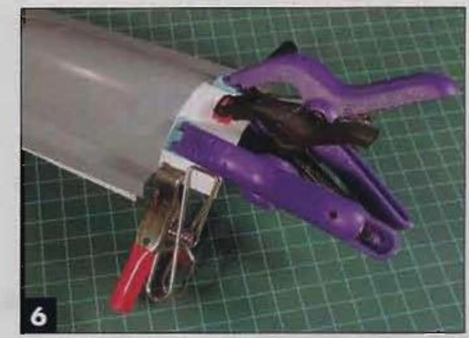
More critical are the rear diving planes and rudder assembly. I cut off the hydroplane locating hole on Part E2, relocating it to ensure proper alignment of both diving hydroplanes.

I trimmed a few millimeters from the propeller hubs to keep them from hitting the hydroplanes.

### The deck

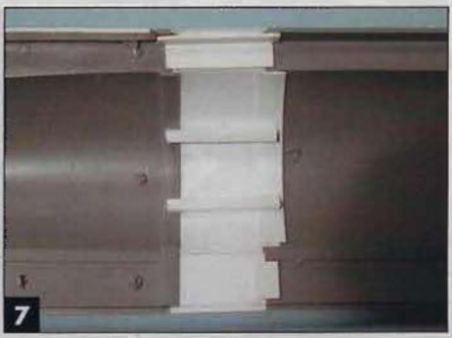
The submarine was finally taking shape! I installed the deck (parts D1, D2, and D3) using lots of clamps to ensure a snug fit. I added a section of styrene between parts D2 and D3 near the stern to lengthen the deck, scribing lines to match the wooden planking on either side of the extension, **9**.

Because I was building a later Type II, I left off the upper-deck net cutter (parts C28, C29, and C30).



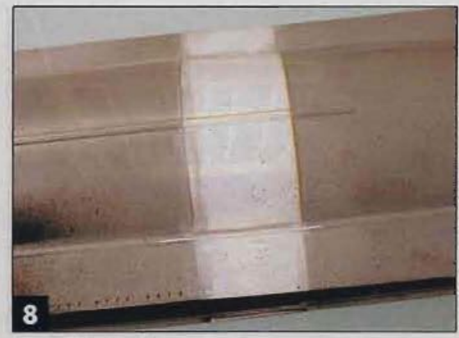
**6**

Clamps hold one of the strips to the hull as the glue dries.



**7**

Harvey reinforced the hull splice by gluing sections of square styrene rod on the inside of the laminate styrene strips.

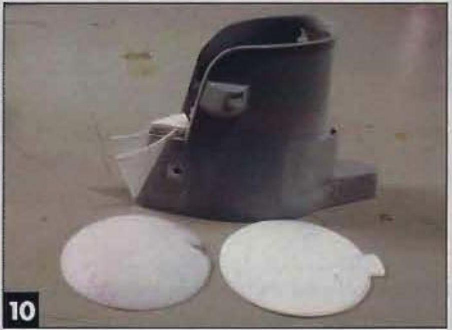


**8**

After filling and sanding to blend the splice into the hull, Harvey extended surface detail such as panel lines and weld seams across the gap using Evergreen styrene half-rounds.

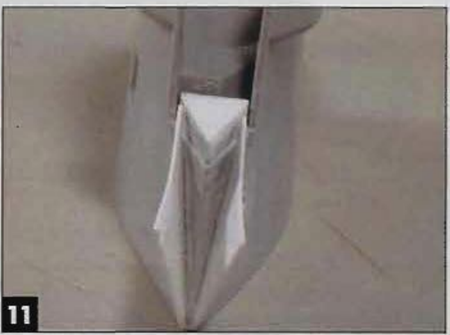
**9**

Special Navy supplied the U-boat's deck in three sections. Harvey filled the gap caused by the hull extension with sheet styrene scribed to match the wood texture on the kit parts. He attached sections of E-Z Safety Tread to the bow and stern.



**10**

The components for *U-9*'s FlaK platform, including rounded sections Harvey cut from a plastic ball.



**11**

To mount the platform, Harvey extended the conning tower with sheet-styrene supports. After they were fitted and attached, he filled the gap at the rear with a rounded insert.

I added HO scale E-Z Safety Tread (No. 311) and small details to the front and rear sections of the deck, an area devoid of detail in the kit.

Next, I drilled holes for diesel exhaust vents on either side of the hull near the stern. The exhausts are situated above the flood vent second from the bow in the long runs on either side of the stern.

After straightening the white-metal handrail stanchions, I drilled holes on the deck and super glued them. I added the deck's other photoetched-metal details and scratchbuilt empty net-cutter brackets on the foredeck.

I omitted the large rudder guards (parts C22 and C23) because photos show *U-9* without them.

Finally, I inserted two aluminum rods into holes drilled through the keel and secured them to the underside of the deck with epoxy. The rods would mount the model on a display stand, but they served as handles during painting.

## The conning tower

The conning tower halves were slightly warped and required clamps to set properly. I shortened Part G2 so it fit properly.

*U-9*'s direction-finder (DF) loop (Part C15) was located on the front-starboard side of the conning tower. I built a bulged base for it by laminating semicircular styrene pieces, then filing and sanding to shape and attaching it to the tower.

*U-9* had a platform for a twin 20mm FlaK gun installed at the rear of the con-

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**Kriegsmarine U-boat Colours and Markings**, Dougie Martindale, SubCommittee Reports No. 58, No. 59, and No. 60, 2004, 2005, available at http://amp.rokket.biz/lib_uboats.shtml

**U-boats: The Illustrated History of the Raiders of the Deep**, David Miller, Brasseys, ISBN 978-1-57488-463-0

**Vom Original Zum Modell: Ubootyp II – Die Einbaume**, Eberhard Rössler, Bernard & Graefe Verlag, ISBN 978-3-7637-6023-7

**U-boats in Action**, Robert C. Stern, Squadron Signal, ISBN 978-0-89747-054-4

**U-boot Im Focus No. 2**, Axel Urbanke (editor), Luftfahrtverlag-Start, ISBN 978-3-9811042-5-7

**Kriegsmarine U-boats 1939-45 (1)**, Gordon Williamson, Osprey, ISBN 978-1-84176-363-7

### SOURCES

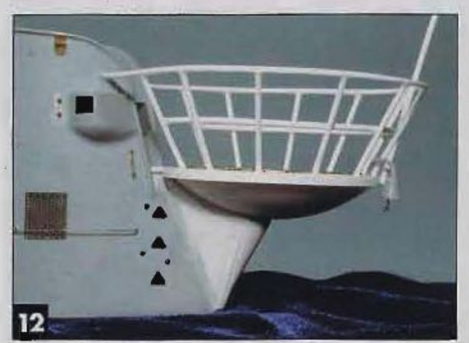
**U-boat Type IIA kit**, Special Navy (No. 72002), available from Squadron, 877-414-0434, www.squadron.com

**Styrene sheet, rod, and stock**, Evergreen, 877-376-9099, www.evergreenscalemodels.com, and Plastruct, 800-666-7015, www.plastruct.com

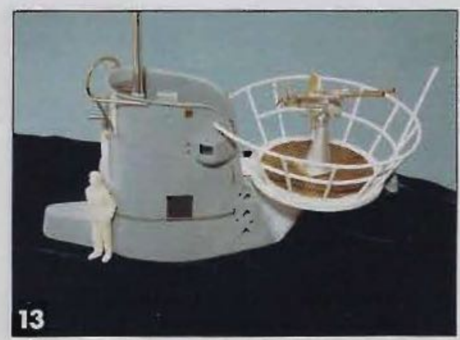
**2cm FlaK Zwilling**, White Ensign Models (No. PE7215), www.whiteensignmodels.com, available from Squadron, 877-414-0434, www.squadron.com

**Turned-brass FlaK 38 barrels**, ArmorScale (No. 72-024), www.armorscale.com

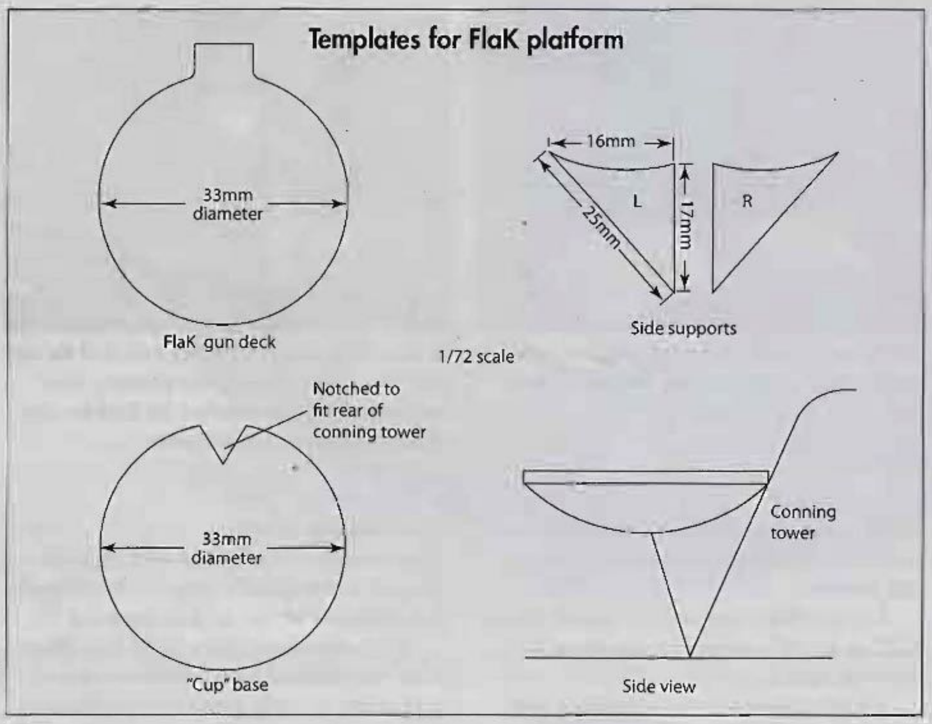
**Draft marking decals**, Accurate Model Parts (No. A-72W), http://amp.rokket.biz/index.shtml



**Harvey fenced the FlaK platform with rails made from .035" styrene rod. Coiling the horizontal bars and immersing them in hot water permanently curved them, making them easier to attach to the uprights.**



**Harvey used photoetched-metal decking designed for Revell's Type VII U-boat to support a twin 20mm gun from White Ensign Models. He could have used styrene strip, but the metal was handy.**


**Templates for FlaK platform**

ning tower in late 1943 or early 1944. I cut a 33mm diameter circle of .030" styrene (see template above). I added styrene shims to bring the platform level with the floor.

The hardest part was reproducing the rounded underside of the FlaK platform, including supports designed as an extension of the conning tower. I cut a section for the round base from a hard plastic ball I found at a craft store.

I fashioned the support platforms support fairing from .010" styrene (see templates), **10**. Note: The extension's shape will vary depending on the depth of the base. I had to do a lot of cutting and sanding until the extension fit snugly to the rounded underside of the platform, **11**.

I filled the steps and cut new ones, using photos for position. I finished by trimming photoetched-metal parts designed for the Revell Type VII U-boat to deck the platform; I could have used styrene strip.

I made railing for the FlaK deck from .035" (.9mm) Plastruct rod (No. 90854), starting with 11 stanchions .59" (15mm) long with small notches cut in the center to align the horizontal bars. I glued them along the edge of the base on a slight angle in predrilled holes. For the horizontal railings, I clamped styrene rod in a tight circle and immersed it in very hot water. When it cooled, I attached the bent rod to the angled stanchions making each join separately with super glue and accelerator, **12**.

Photos of *U-9* show a twin 20mm FlaK gun on the tower and a single 20mm gun on the foredeck. I used White Ensign Models 2cm FlaK Zwilling, omitting the gun shield to match photos. The kit's single 20mm gun was built stock. I replaced all of the gun barrels with ArmorScale's exquisite 1/72 scale brass 20mm FlaK 38 barrels, **13**.

## Painting and weathering

I modeled *U-9* in 1943 Black Sea camouflage, using the following acrylics:

- Tamiya XF-63 German gray – hull below the waterline (RAL 7016)
- Tamiya XF-66 light gray – hull above the waterline (RAL 7038)
- A mix of Tamiya XF-24 dark gray and XF-8 flat blue – hull side and conning tower lower camouflage (RAL 7024)
- Tamiya XF-20 medium gray – conning tower mid-camouflage band
- Tamiya XF-80 royal light gray – conning tower upper-camouflage band

Photos of U-boats show significant weathering including faded, flaking paint, as well as rust, salt, and water marks. Some show huge swaths of missing paint revealing previous layers in various stages of decay. Weather-beaten, discolored paint is natural given the constant surfacing and diving in salt water, paint shortages, and poor paint quality – weathering much different from that of land vehicles.

### The hull

Research indicates U-boats did not have red-brown anti-fouling paint on the hull below the waterline, or the boot top found on Kreigsmarine surface ships. I painted and weathered the hull in stages:

**1.** I sprayed Tamiya gray fine primer.

**2.** I applied Tamiya spray-can German gray (TS-4) to the hull above and below the waterline. Then I applied random, vertical streaks of XF-63, varying the color a little by adding white and then black. This very dark gray will serve as the undercoat of paint revealed through flaking.

**3.** A coat of clear gloss followed. (I used Tamiya, but any brand will do.) The smooth finish makes for easy removal of the Humbrol Maskol to come.

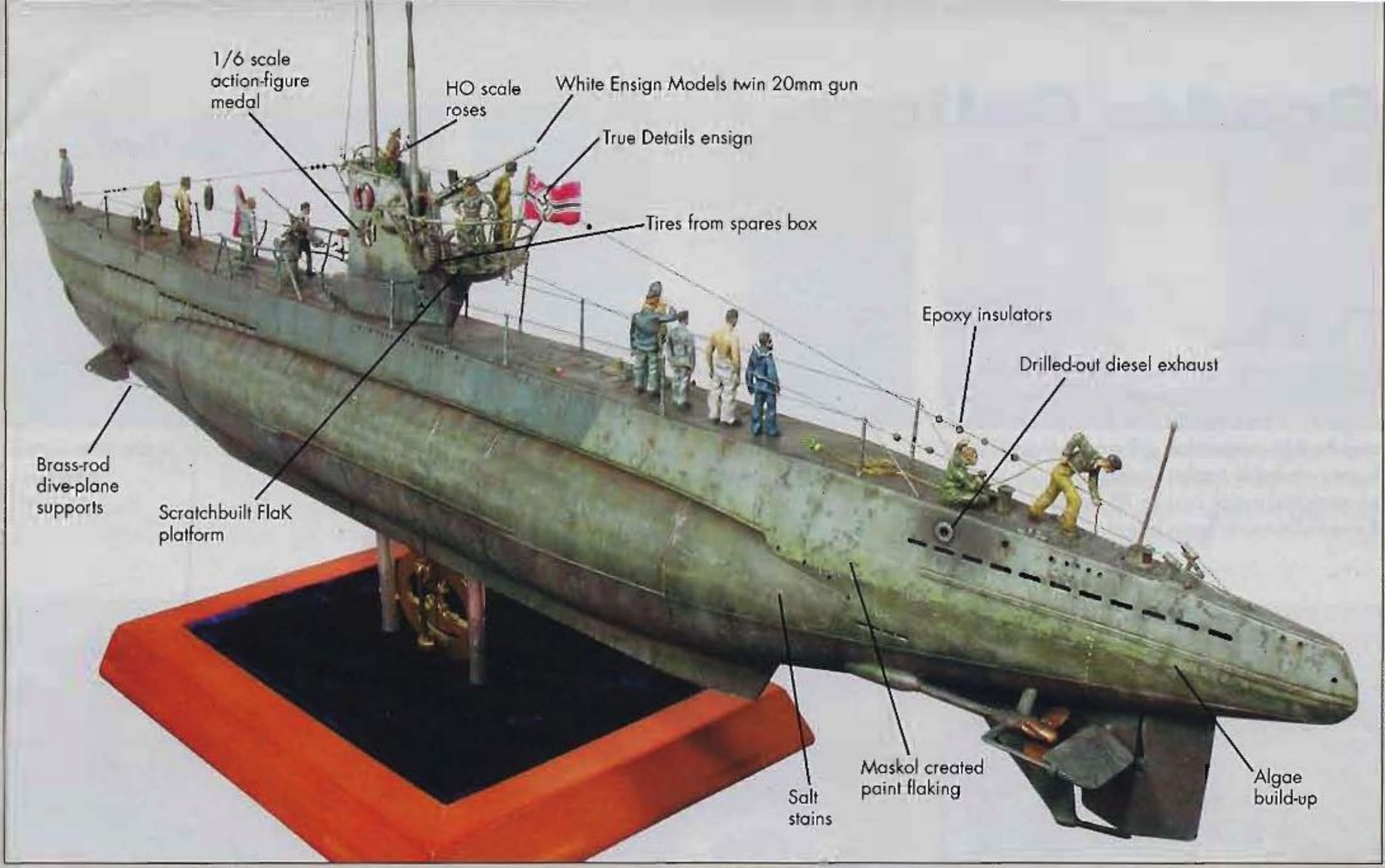
**4.** I stippled Maskol randomly over the hull below and above the waterline. I was more sparing above the waterline.

**5.** I mixed several shades of Tamiya IJN (Sasebo Arsenal) gray (XF-77) by adding white and black, then airbrushed random vertical streaks.

**6.** Using masking tape, I removed the Maskol below the waterline to replicate flaking paint. (Do not remove the Maskol on the upper hull areas just yet.)

**7.** I misted a few coats of German gray over the lower hull to even out the colors and tone down contrast.

**8.** With the lower hull complete, I masked off everything below the waterline.


1/6 scale action-figure medal
HO scale roses
White Ensign Models twin 20mm gun
True Details ensign
Tires from spares box
Epoxy insulators
Drilled-out diesel exhaust
Brass-rod dive-plane supports
Scratchbuilt FlaK platform
Salt stains
Maskol created paint flaking
Algae build-up

**Multiple layers of paint with filters and washes created the weathered and weary U-boat Harvey wanted. *U-9*'s crew is a combination of Andrea Miniatures and CMK figures. The roses are HO scale model railroad foliage made by Busch Models of Germany; the docking cushions are made from Tamiya epoxy putty.**

**9.** I airbrushed shades of light gray (XF-66) randomly over the upper hull, then applied small amounts of Maskol.

**10.** The dark gray camouflage band (a mix of XF-24 and XF-8) on the midsection of the upper hull went on next.

**11.** Then, I removed the Maskol with tape to create paint flaking and show both dark and light gray. A mist coat of light gray blended the colors.

**12.** I applied filter coats using Mig Productions blue (P240) and light gray (P400) filters to add depth to the colors, then removed the lower hull mask.

**13.** After a gloss coat, I applied decals, including draft markings from Accurate Model Parts.

**14.** I started weathering by spraying Tamiya smoke (X-19) into recesses. Then, I added a "grunge line," simulating sludge and algae built up along the waterline, with a mixture of Tamiya clear green (X-25), clear blue (X-23), clear orange (X-26), and linoleum deck brown (XF-79). I sprayed thin layers of the mix along the waterline and upper saddle tanks. Next, I stippled a thick wash of light gray along the waterline to replicate salt stains, using a piece of cardboard wrapped in cellophane as a straightedge. Finally, I used a compressed-air canister to blow specks of diluted zinc chromate green and light gray onto the hull for algae and barnacles.

**15.** I sparingly applied rust streaks using Mig Productions pigments and pinwashes of Winsor & Newton burnt sienna artist's oils and Humbrol thinner. Note: I didn't add rust to the flood holes, as they show water stains with little rust.

**16.** After raw umber artist's oil washes, I simulated minor paint flaking and salt stains with an HB (No. 2) pencil and a light gray crayon pencil. Finally, I lightly brushed white and light gray Mig pigments beneath the flood holes for water stains.

**17.** I sealed everything with a coat of Model Master Acryl clear flat.

The conning tower was painted as above on a base coat of light gray (XF-66) including the interior. The weathering was lighter than on the hull, but I added more rust as these areas would have been more exposed to air than the lower hull.

## The deck

German U-boats decks were wood painted black that faded to charcoal-brown. I painted the deck as follows:

**1.** Over a base of Model Master Italian dark brown enamel, I added random patches of Tamiya NATO black (XF-69).

**2.** While the black was still wet, I applied Tamiya acrylic thinner and spread the NATO black around, revealing brown.

**3.** I finished with a Mig Productions dark brown filter (P245) and a targeted Citadel black wash in the flood holes. I used light gray and dark brown pencils for salt stains and worn wood before sealing with Acryl clear flat.

My secret to weathering is alternating between washes and filters until you reach the desired effect. Subtlety is my goal, layering each technique to avoid uniformity.

## Final construction and details

I glued the conning tower to the deck; when I discovered gaps along the base, I glued a .010" styrene strip around it and painted it black-gray to further cover it up. Some U-boats had a black stripe painted at the base of the sail, so my fix was accurate.

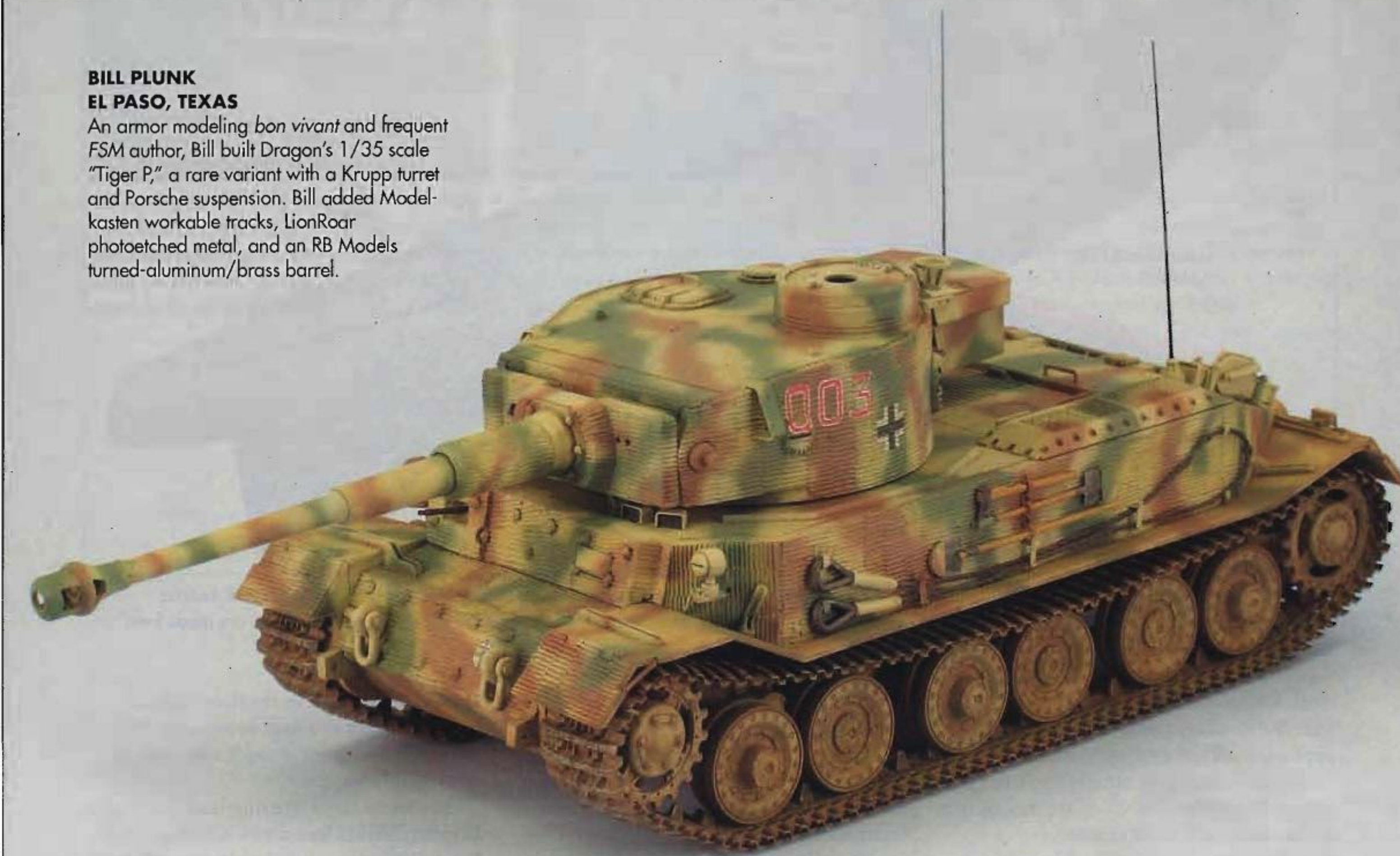
After adding final details, I rigged the sub, painting the wires gunmetal and adding blobs of epoxy, painted black-gray, for insulators. I painted Andrea Minaitures and CMK crew figures with Vallejo acrylics.

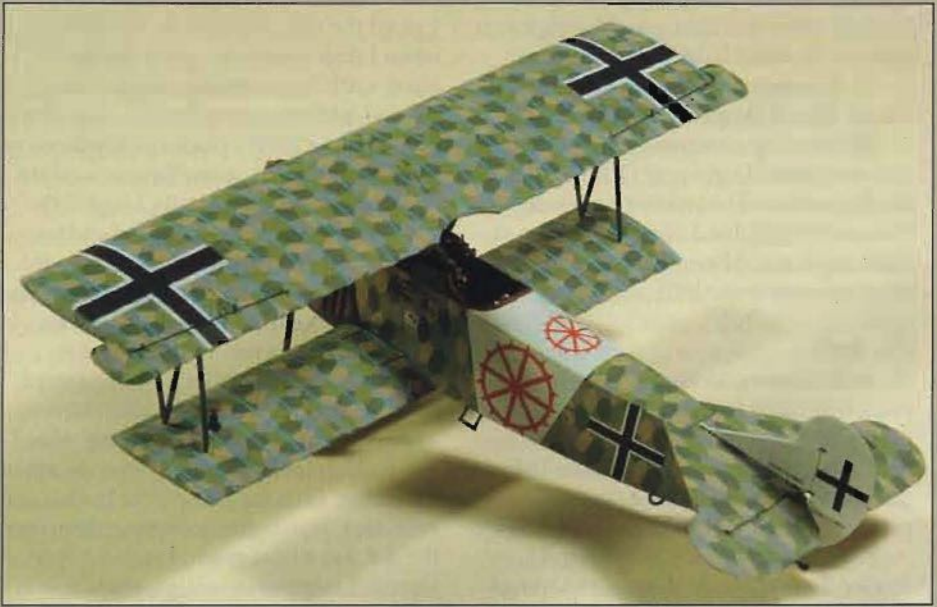
*U-9*'s insignia was an Iron Cross to commemorate the earlier *U-9* that served in World War I. While pondering how to make the cross, I discovered exactly what I was looking for in Dragon's 1/6 scale action figure line. I cut the pins off the medals and repainted them before mounting them on the sail. For a final touch, I added a True Details Kriegsmarine ensign, shaping it in a solution of water and white glue. The tonnage pennants came from Revell's Type VII kit. **FSM**

# Reader Gallery

**BILL PLUNK**
**EL PASO, TEXAS**

An armor modeling *bon vivant* and frequent *FSM* author, Bill built Dragon's 1/35 scale "Tiger P," a rare variant with a Krupp turret and Porsche suspension. Bill added Modelkasten workable tracks, LionRoar photoetched metal, and an RB Models turned-aluminum/brass barrel.



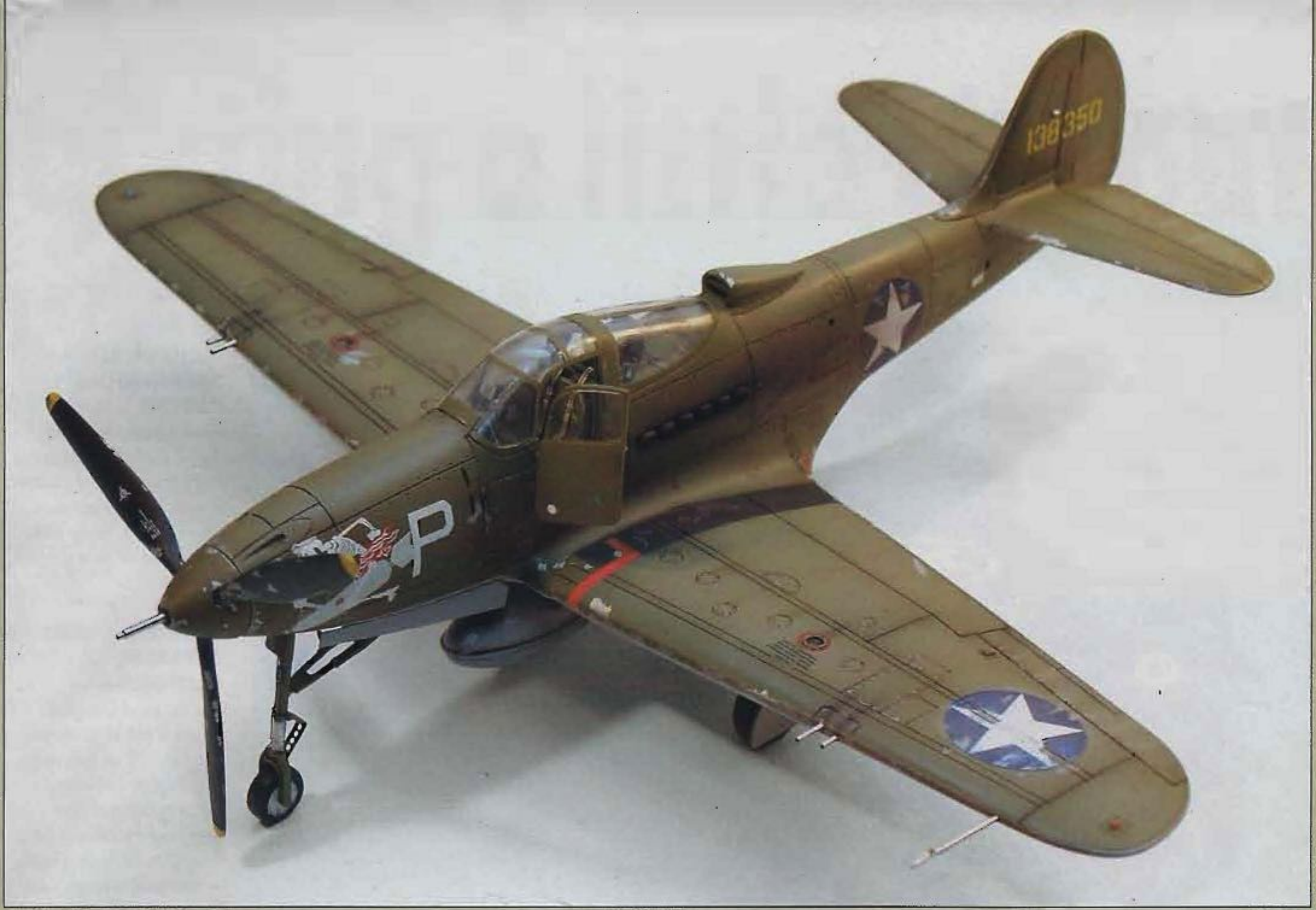


**◀ PAUL MAHONEY**
**LARCHMONT, NEW YORK**

Taking a break from his usual World War II airplanes, Paul built Eduard's 1/48 scale Fokker D.VII from the box except for stainless steel rigging and stretched sprue for the control linkage. He says about 75 percent of his modeling time went to applying the rib tapes and lozenge decals. Paul recommends the kit to anyone interested in trying a biplane. "Everything you need is in the box," he writes, "and the rigging (which might scare away potential builders) is minimal."

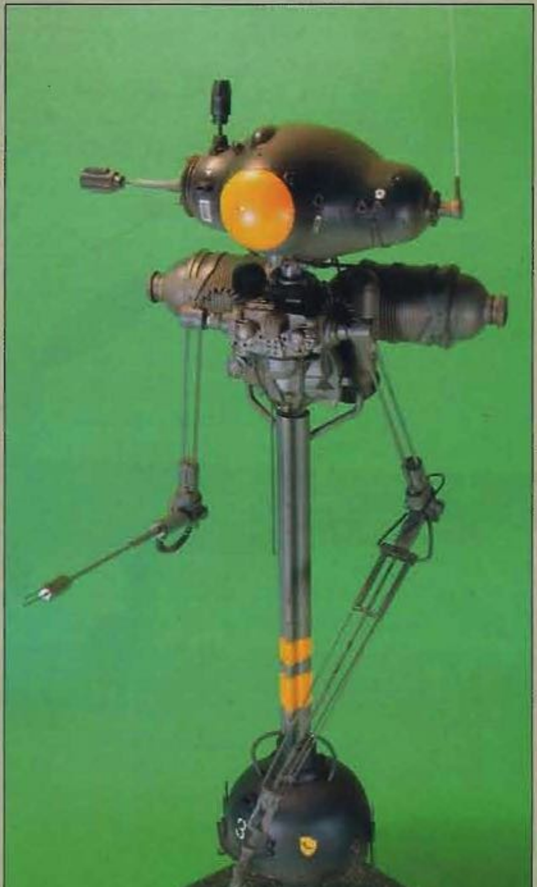
**▶ PATRICK ACKERSON**
**RADCLIFF, KENTUCKY**

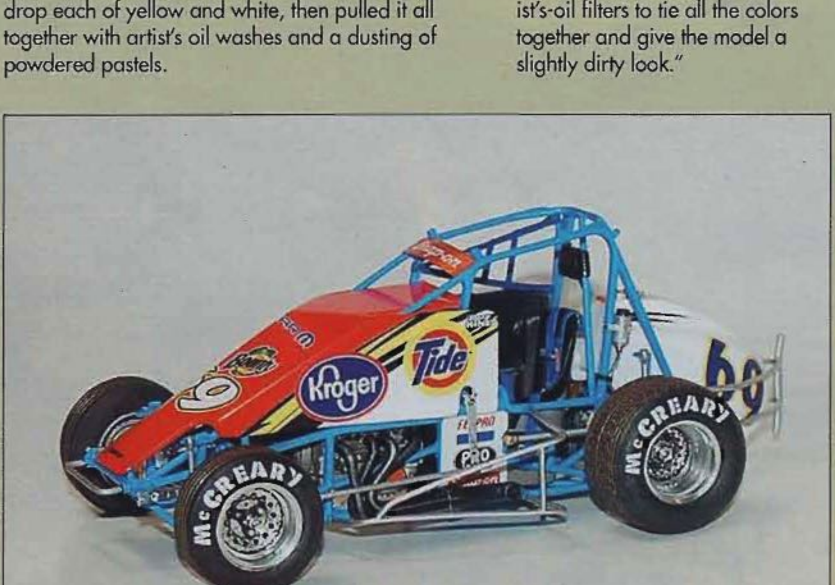
Patrick switched from painting figures and building armor models to go after a dirt-track sprint car, using Monogram's 1/24 scale kit, Tracy Hines Tide/Kroger livery by Sprint Graphix, and other decals by Slixx. He says, "I left the front and top wings off, like the real car, and replaced the hood with a modern-looking one from an Australian company, The Parts Box."

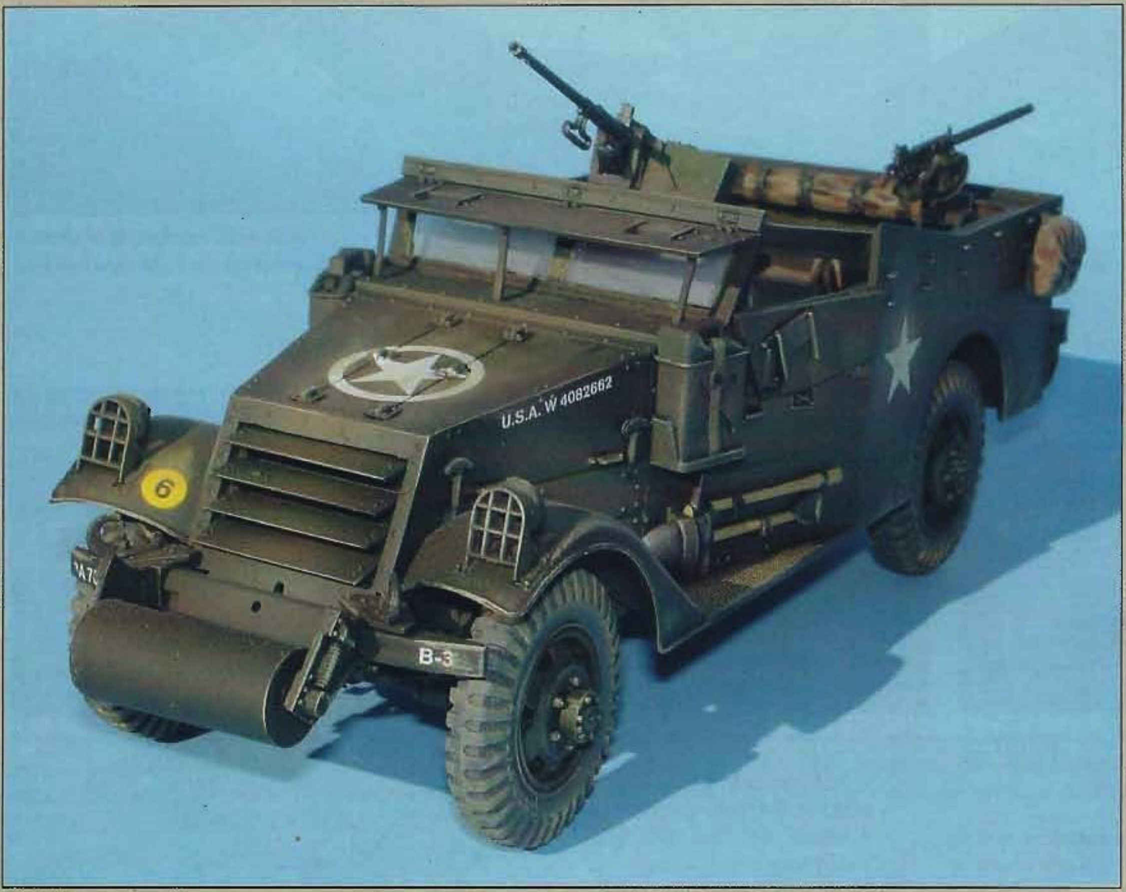


**▲ ALEKSANDAR POCUC**
**NOVI SAD, SERBIA**
"For some unknown reason, the Airacobra is my favorite World War II bird. I build one whenever I get the chance," says Aleksandar, who took a spin with Hasegawa's 1/48 scale kit to model a P-39D-1 of the 35th Fighter Squadron, based in New Guinea in 1942. He used Eduard's "Big Ed" photoetched-metal set and applied Superscale decals. Painting with Model Master enamels, he faded selected panels by lightening the olive drab with a drop each of yellow and white, then pulled it all together with artist's oil washes and a dusting of powdered pastels.

**► ALFONSO PEREIRA**
**FOREST GROVE, OREGON**
Alfonso writes: "This is the 1/20 scale Neuspotter from the Maschinen Krieger universe. It was built straight from the box. The base is a scrap of wood colored with textured paint; piano wire supports the model. I painted it with Tamiya acrylics and weathered with pastels. I also used artist's-oil filters to tie all the colors together and give the model a slightly dirty look."





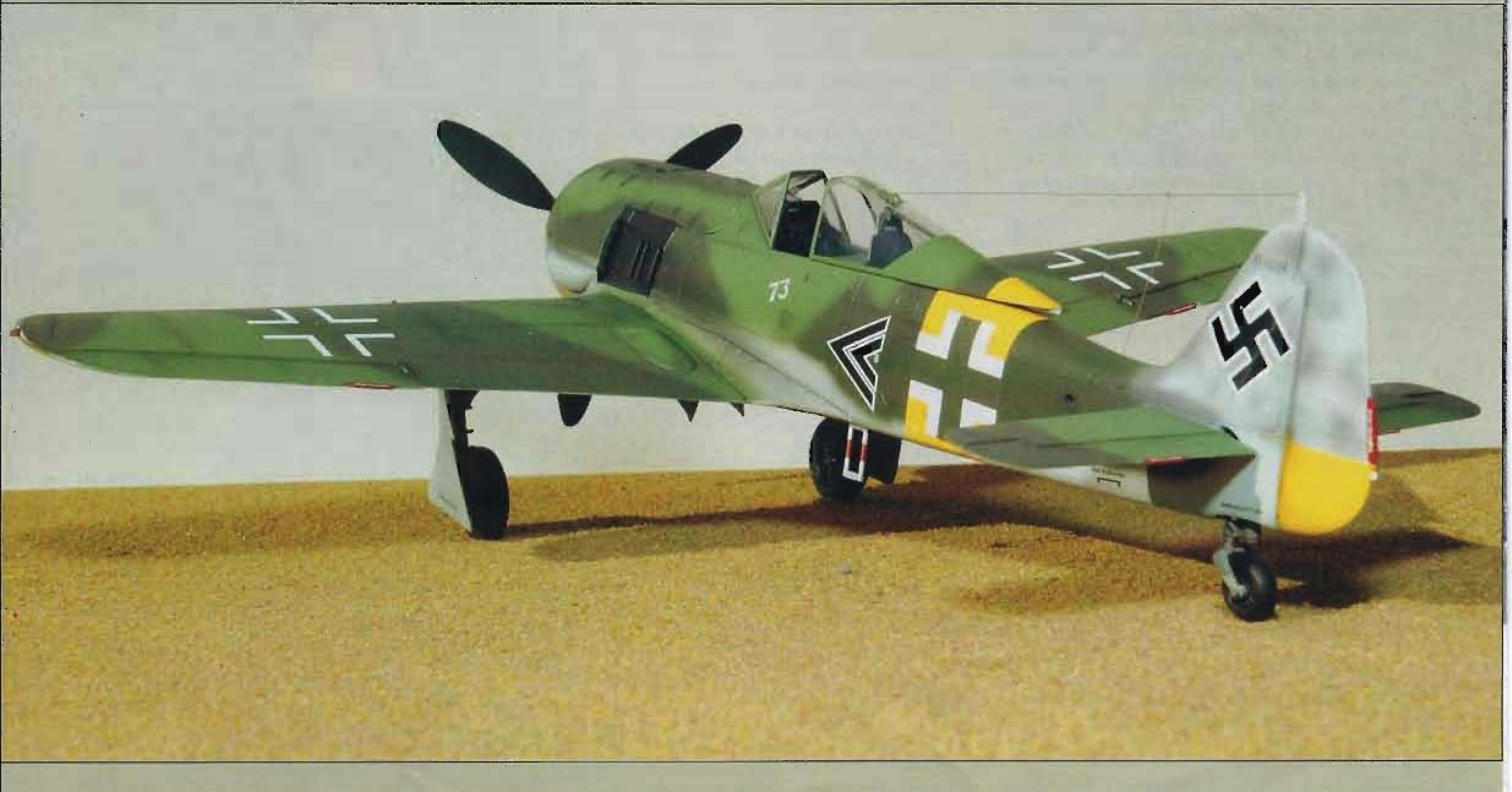


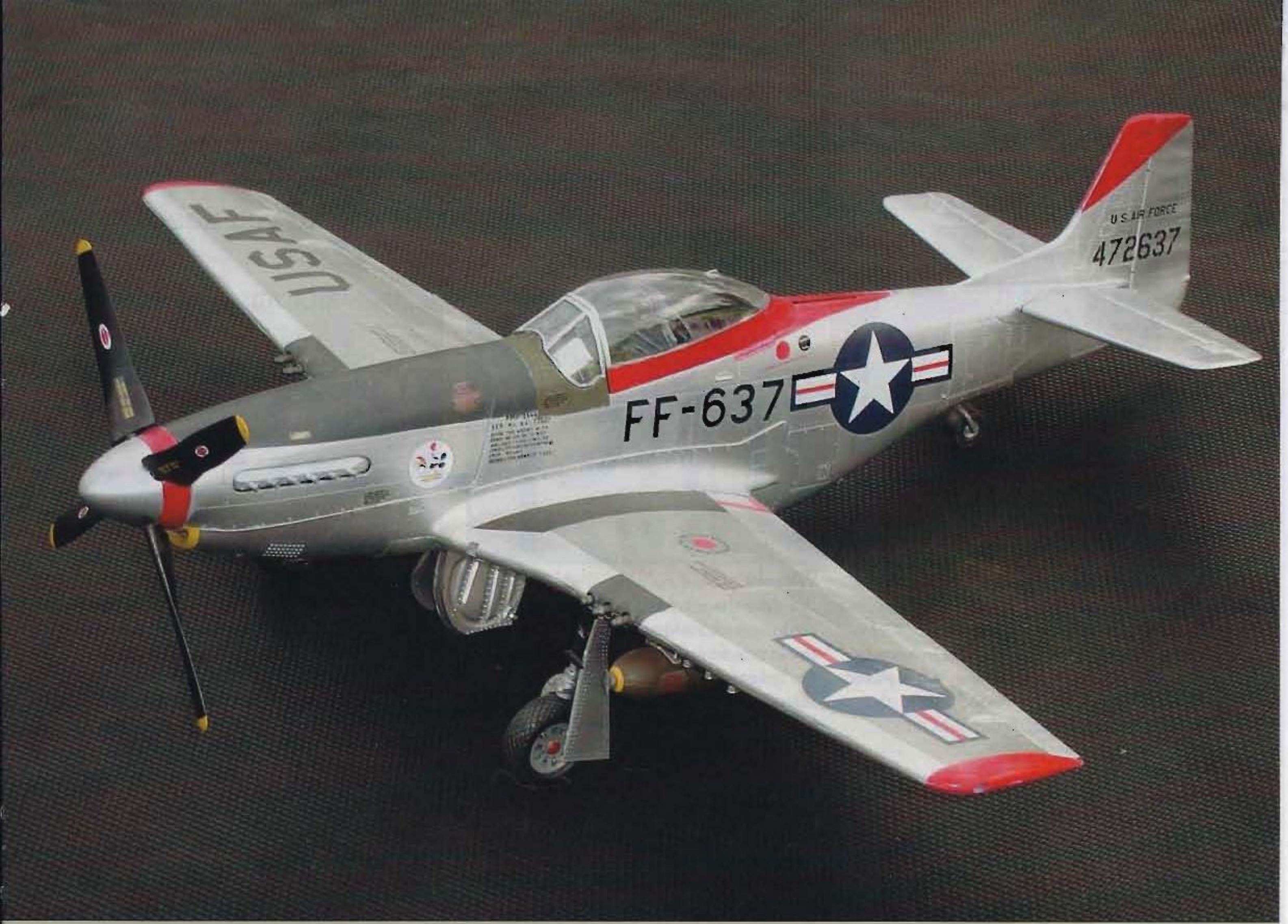
◀ **CHUCK ALESHIRE SHOREWOOD, ILLINOIS**

Chuck built Revell's old 1/35 scale M3 scout car from the box and painted it with Tamiya acrylics. "It was a quick, easy build of a somewhat rare subject," he says.

▼ **FAUSTO J. GUZMAN BURBANK, CALIFORNIA**

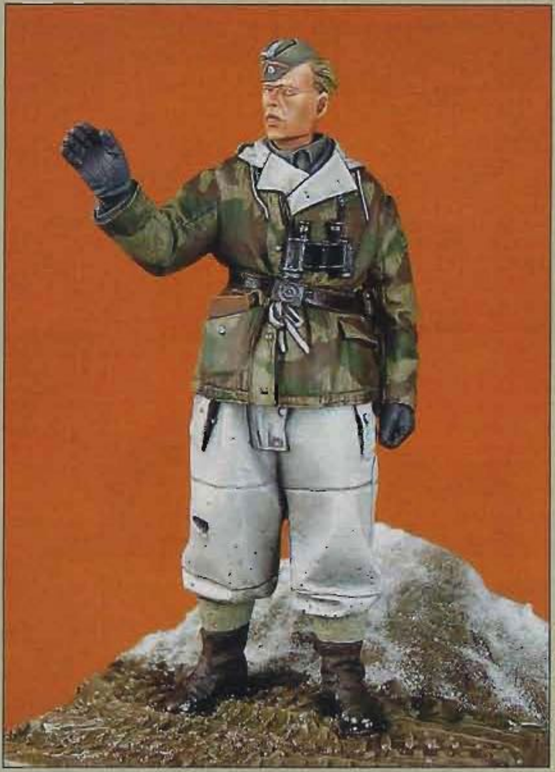
Fausto used Dragon's 1/48 scale kit to model the Fw 190 of Luftwaffe ace Walter Nowotny, adding Eduard photoetched-metal seat belts, True Details resin wheels, Aeromaster decals, and Gunze Sangyo acrylic paints. He finished with Testors Model Master clear acrylic flat and powdered pastels.





▲ **MATT CURRIER**
**PALM BAY, FLORIDA**
Matt modeled Trumpeter's 1/24 scale P-51D as an F-51 Mustang in the markings of the 67th Fighter Bomber Squadron of the 18th Fighter Bomber Wing based at Chinhae, Korea, in 1951. He used Testors Model Master buffing Metalizer and cut the red markings from Tauro Model solid red decal sheet.

▶ **JOE HUDSON**
**ST. CHARLES, MISSOURI**
In the March 2010 *FSM*, Joe and Carissima Hudson co-authored an article on building woodlands in a scene from the French and Indian War. Here, Joe fast-forwards to Europe and World War II to model Alpine's 1/35 scale German tanker, painting it entirely with acrylics. "It was a joy to paint and full of details," he says.



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# TANK techniques &

## Basic armor modeling skills are all you need

BY GLENN BARTOLOTTI

Sometimes it's nice just to build something. When I picked up Italeri's Carro Armato L6/40, I decided to eschew aftermarket products and use only what was in the box (which even provided a little photoetched metal to detail the light tank).

### Alignment

Some armor kits come with the lower hull molded as a single part. But Italeri chose to make the L6/40's hull from four flat components.

It fits well, but it's important to pay attention to the alignment of the major components. A slight deviation at this stage is magnified as construction progresses, causing parts not to fit. So, take your time, dry-fit, and double-check any less-than-positive fits before finally committing glue to plastic.

I didn't have any major problems with the L6/40's hull, and I fit the interior parts at this stage before painting. It's basic, but it looks good, **1**.

### Wheels

Building the rear idler assemblies, I discovered the part numbers were mislabeled in the instructions – another reason to check fits before gluing, **2**. When I attached the idlers to the hull, I was very careful about how they lined up, checking references to be sure they were right. It is important that they line up because the kit's link-and-length tracks are designed to fit a certain arrangement, **3**.

The suspension builds up in two units on each side. This arrangement allows for articulation but, because I was using the kit's link-and-length tracks, I wanted all of the wheels, from the idler to the front road wheel, level. Ensuring that I had the right parts and dry-fitting them helped. I glued Part 23A last to make sure it lined up, **4**.

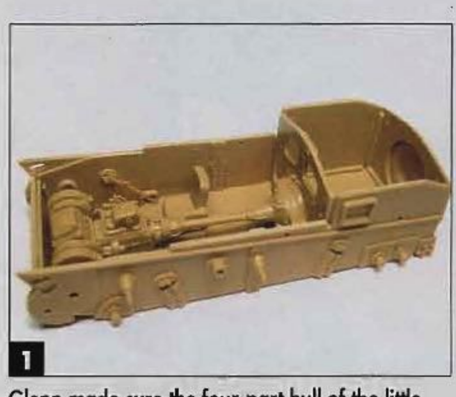
I clipped the long runs of tracks from the sprue to ensure the wheels lined up, **5**.

### Tracks

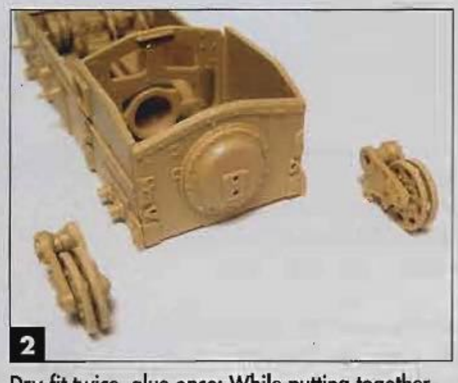
When working with link-and-length or individual-link tracks, I glue a side's entire run together first, then wrap it around the wheels. This may seem more difficult than dividing the runs into sections, but experience has taught me I get straighter runs doing it this way.

I assembled the runs according to the instructions, but added a few links at the end; it's better to take off extra links than to come up short, **6**. (I'm glad I did, because I needed 21 individual links rather than the 17 called for!) With the links pushed together, I brushed Testors liquid cement (the stuff with a pink label) over the back of the track run, letting the glue flow into the gaps between the links. Then I let the glue dry for about five minutes until it was tacky enough to hold the links together but still flexible.

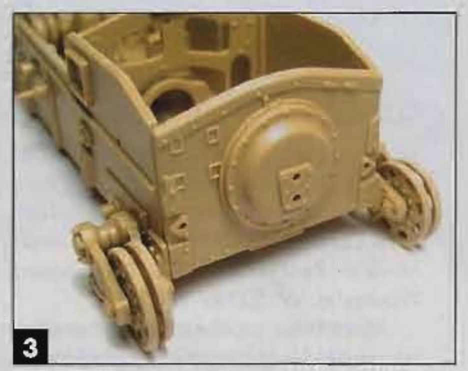
When I started to wrap the tracks around the running gear, I discovered a problem: The drive sprockets' teeth were too big for the corresponding holes in the links, and the spacing was off. To make a long story short, the tracks wouldn't fit on the sprockets.


**1**

Glenn made sure the four-part hull of the little Italian tank squared up. A misalignment this early in a build can cause big problems later.

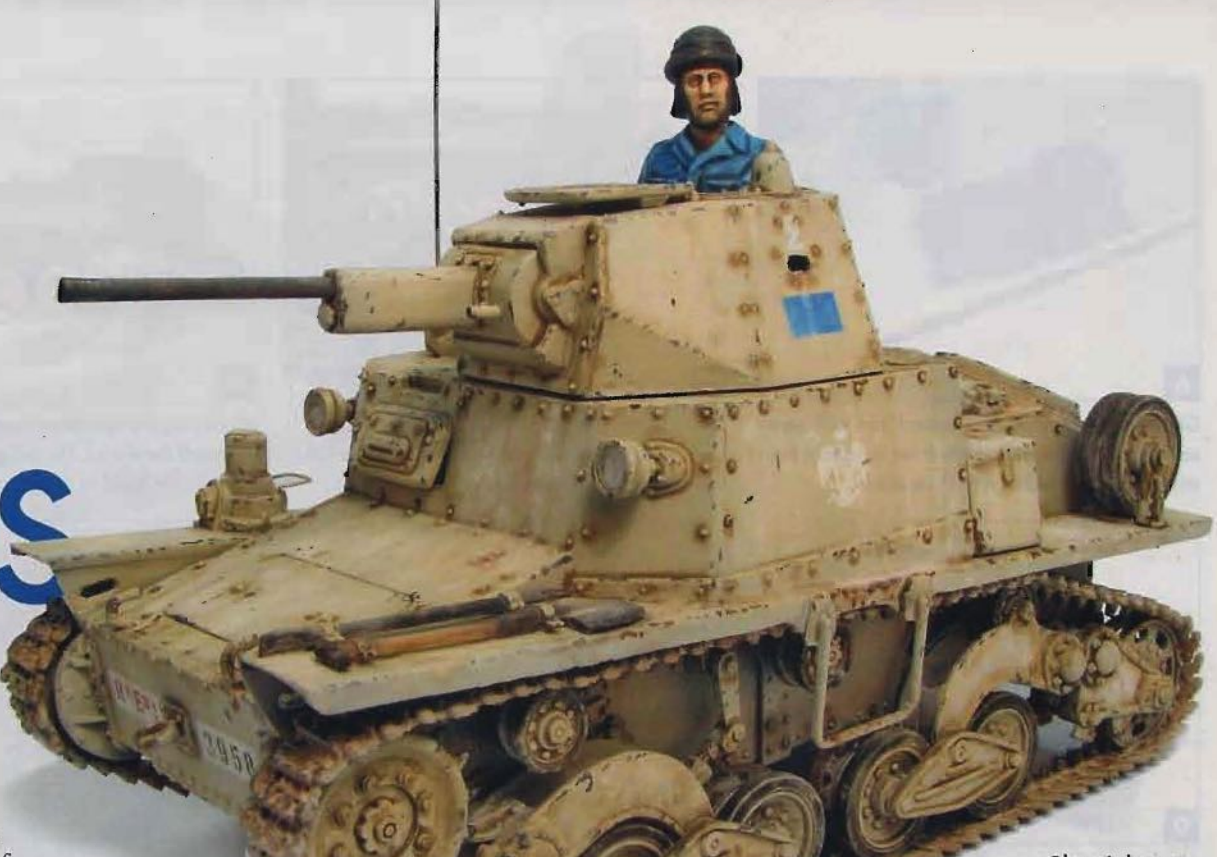

**2**

Dry-fit twice, glue once: While putting together the idler assemblies, Glenn discovered the parts were mislabeled in the instructions.


**3**

When building a tank that will sit on a shelf, it's important that all of the road wheels touch the ground. Glenn made sure the idlers were positioned correctly before gluing.

# tips



Glenn is known for his detailed models and well-built dioramas, but his straight-from-the-box build of Italeri's 1/35 scale L6/40 shows his foundation in good, basic modeling skills.

This may discourage some builders from using the kit tracks and/or drive sprockets in favor of aftermarket items. My solution, while less elegant, works well and is largely invisible: I cut the teeth off the sprockets wherever the tracks touched them, **7**.

After that, the tracks needed a little maneuvering to look right. But I'm happy with the results, **8**.

I feel tracks make or break an armor model. I attach them before painting so I know they are glued on well and look right. Some modelers question adding tracks this early, especially when it comes to getting paint into all the nooks and crannies. My theory: If you can see it, you can paint it … well, kinda. First, I airbrush everything I can. Then, I apply controlled washes and let thin paint run around the road wheels to cover color shortfalls. Weathering washes and pastels blend everything together, further disguising any unpainted areas. If I built a factory-fresh tank, my finishing style would not work.

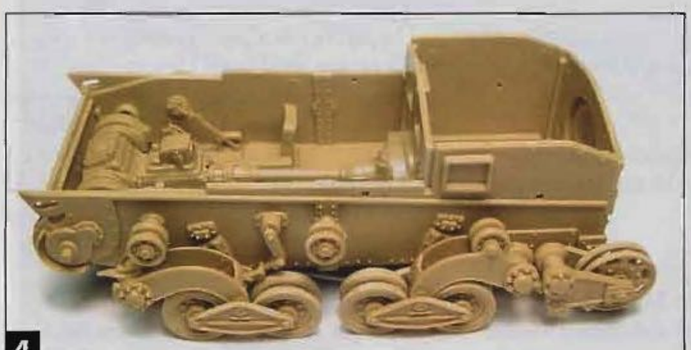
## Upper hull

After gluing the fenders to the lower hull, I assembled the superstructure. Once again, test-fitting showed that the upper hull didn't quite fit. I had to sand the edges of the section marked on the fenders to get a snug attachment, **9**.

I masked the interior and airbrushed it flat white, **10**. If more of the fighting compartment were visible on the finished model, I would have airbrushed shadows and highlights. This tank is tiny, so I left the interior alone (except for picking out details and a little pastel weathering), **11**.

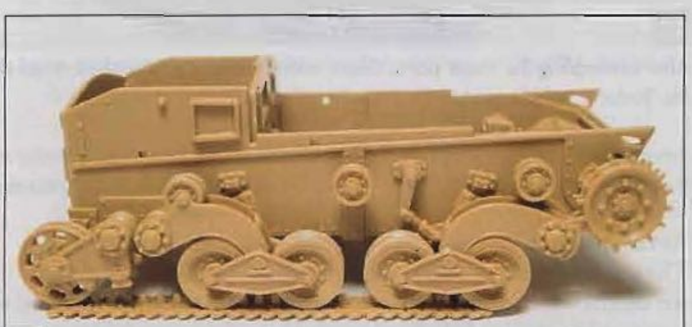
After gluing the upper hull in place, I attached the photoetched-metal details and other equipment, **12**. References are handy for positioning details when instructions are vague. I used Mr. Surfacer to eliminate minor gaps between subassemblies.

The kit's engine hatch clasps (parts 6B)



**4**

Italeri's clever design makes it possible to animate the L6/40's suspension. Glenn wanted his straight, so he test-fitted everything before adding glue.

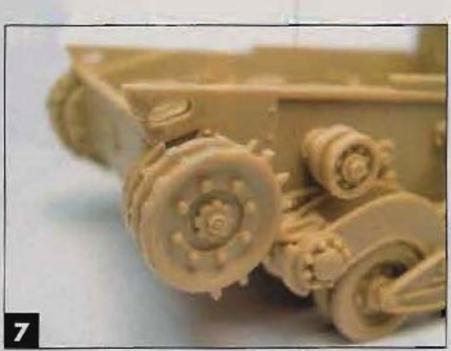


**5**

A handy alignment jig? Glenn uses the kit's continuous bottom link to ensure that the wheels touch the ground and are aligned, front to back.

**6**

Glenn glues one side's entire track run with slow-setting liquid cement and lets it set for about five minutes, then attaches it to the model.

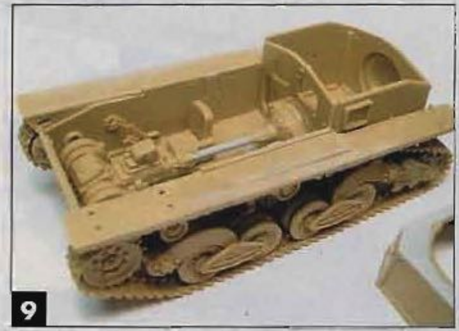


**7**

When Glenn discovered that the drive sprocket teeth were too big for the tracks, his simple solution was to trim the teeth.

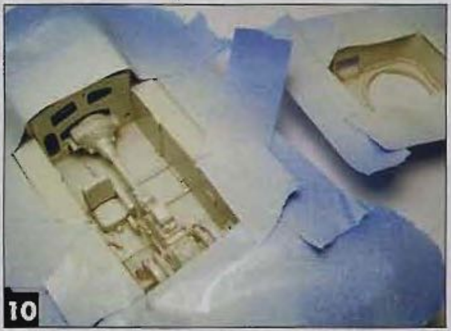
**8**

Modifying the sprockets made it easier for Glenn to install the tracks. He prefers to attach them early in the build to ensure a good fit.



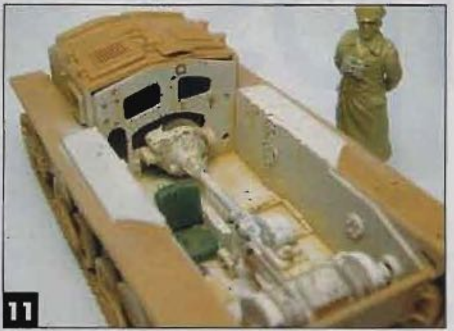
**9**

Glenn filed the sponson locator on the fenders to produce a tighter fit between the upper and lower hulls.



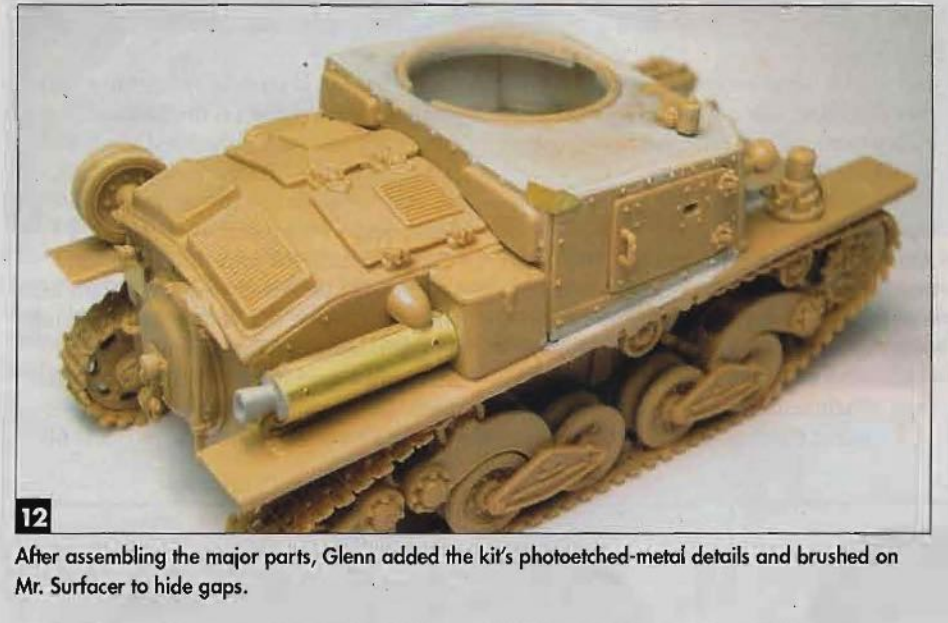
**10**

To minimize scraping and sanding of future mating surfaces, Glenn masked the edges of the hull components before airbrushing them flat white.



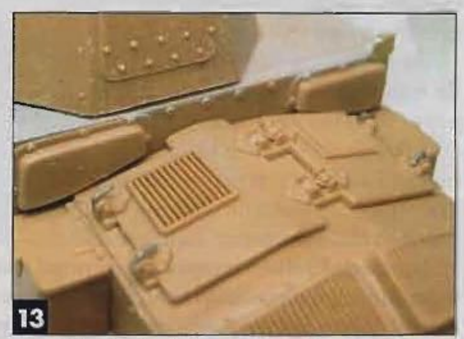
**11**

Rommel-approved! With very little of the interior visible from outside, Glenn painted details and added a little pastel weathering. It's just enough to look OK when the turret is off.



**12**

After assembling the major parts, Glenn added the kit's photoetched-metal details and brushed on Mr. Surfacer to hide gaps.



**13**

Unsatisfied with the kit's over-scale engine-cover clasps, Glenn replaced them with short pieces of fine wire.

were out of scale, so I replaced them with fine wire, **13**.

## Turret and gun

The turret assembled easily and, although the details were Spartan, Italeri included nice touches, such as bolt detail inside the turret.

The gun came in two parts; I damaged the barrel removing it from the sprue, so I replaced it with a piece of styrene rod, drilling out the muzzle and flaring it slightly with a metal needle to replicate the original, **14**. After painting, the turret was complete, **15**.

## Painting

I sprayed the model with Model Master gray enamel primer, then airbrushed Model Master Afrika braun (No. 2012) lightened with a little white. After a coat of Model Master clear gloss I applied kit decals for the Italian North African tank, then sealed the decals with a coat of clear flat.

I painted the road-wheel tires with a black wash and painted the tools, **16**.

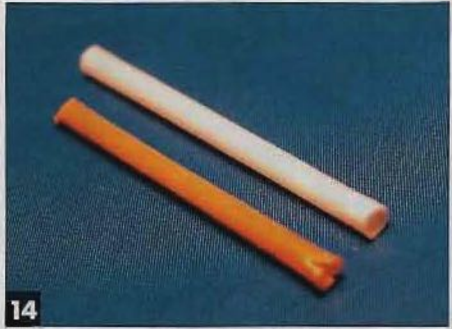
The figure has a Tamiya body with an Italian tanker head from Hornet.

I thought the kit's headlight lenses were too small, so I replaced them. First, I glued aluminum foil inside the light, **17**. Then I filled the light with tacky glue, a thick PVA adhesive used for crafts, **18**. It dries clear, looks very realistic, and is cheap, **19**.

## Weathering

I use pastels and artist's oils for weathering.

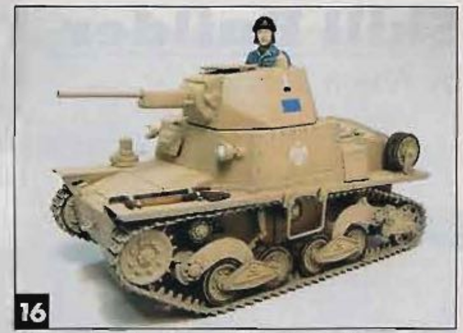
The pastels are cheap, art-store sticks ground to a powder with a file. I mix them with odorless turpentine and apply them selectively as a filter, not over the entire vehicle.


14

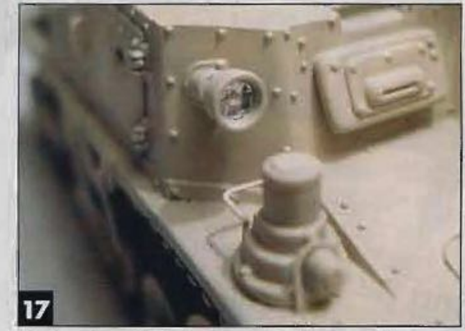
After damaging the gun barrel, Glenn replaced it with styrene rod, drilled out the muzzle, then flared it with a needle to match the L6/40's gun.

15

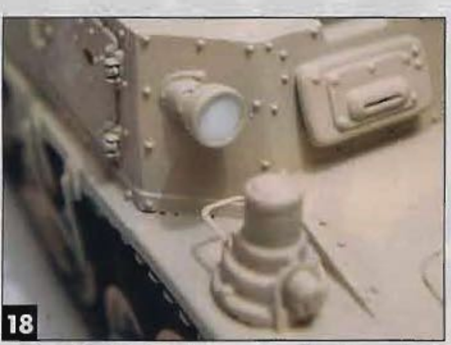
Mounting the barrel on the turret completed major construction.


16

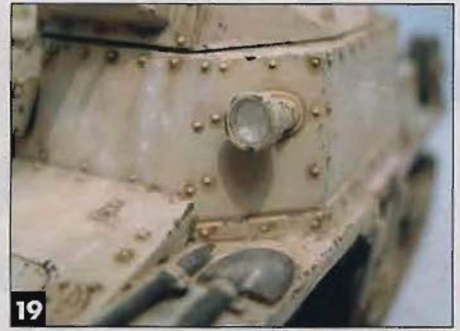
Glenn primed and painted with Model Master enamels, then gloss-coated before applying the kit decals to model a tank in North Africa.


17

The kit's headlight lenses looked too small to Glenn, so he replaced them. First, he pushed aluminum foil into the bezels …


18

… then, he filled the light with tacky glue, a thick and inexpensive craft glue that dries clear.


19

Dried and weathered, Glenn's tacky-glue headlight lens looks the part.

I applied rust shades in wet glazes to the muffler and used slightly darker tones on the shovel blade.

I mixed light desert sand-colored pastels with white artist's oils and brushed on a thin layer to highlight prominent areas.

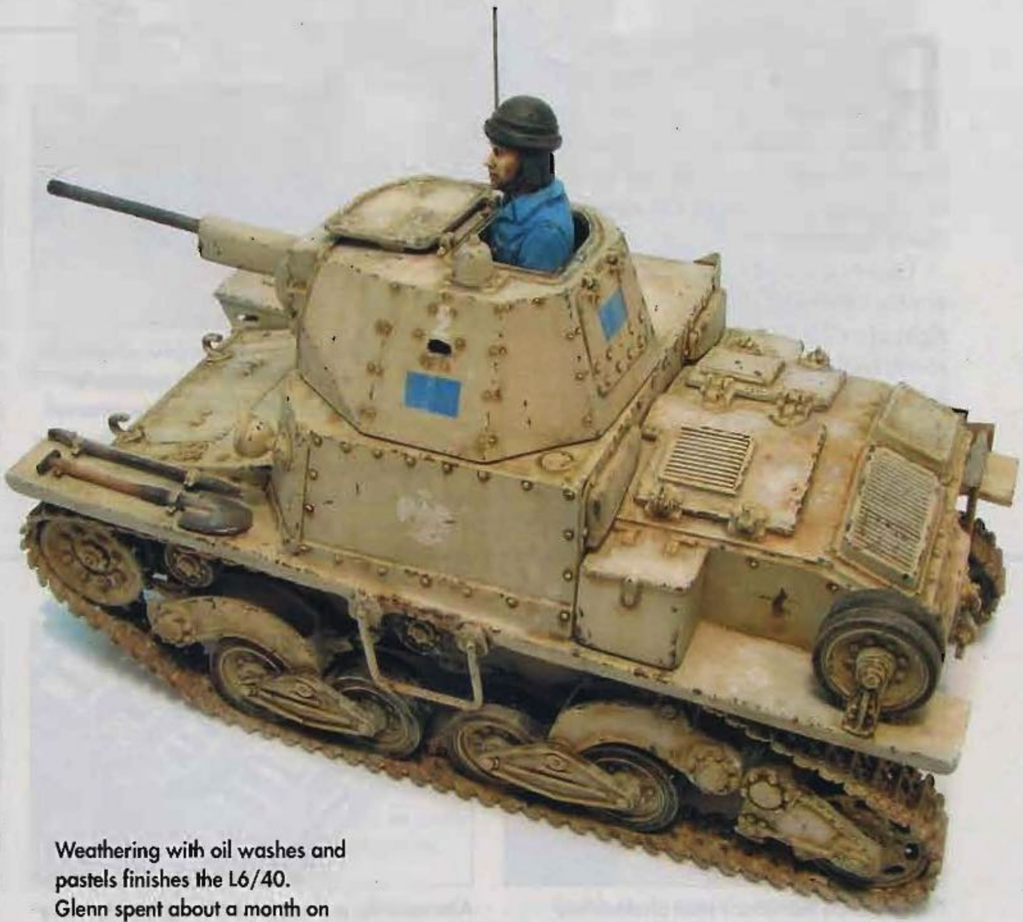
To apply a raw-umber wash, I first wet the area with clean turpentine. Then I use a fine brush to add thin paint around recesses and add streaks of color.

I never dry-brush my models. To my eyes, a dry-brushed finish looks OK from a distance – but put a macro lens on a camera and the model looks like a frosted cake. I've used this technique in the past and hate the way my older models look. I think it's easier and takes less time to add shadows and highlights with an airbrush, then fine-tune them with washes and filters.

Italeri's little L6/40 is a nice kit that builds up well out of the box – and sometimes that's just what the doctor ordered. A build like this can be the perfect antidote to Advanced Modeler's Syndrome, and a great way to practice the basic skills every model requires. **FSM**

**www.FineScale.com**

For a description of the technique Glenn used to join the link-and-length tracks, visit www.finescale.com/Videos/How To and view "Assembling individual-link tracks."


Weathering with oil washes and pastels finishes the L6/40. Glenn spent about a month on this out-of-the-box build.

**Skill Builder**

by Aaron Skinner

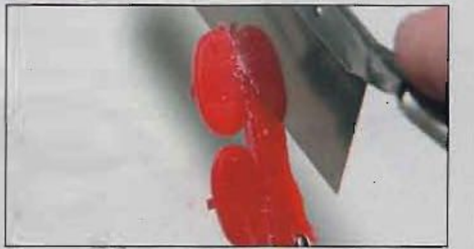
# TRIMMING PARTS

Yeah, it's basic, but getting parts off trees is the first step to a successful build

Remember your first models, when you grabbed parts and twisted until the sprue relented and the pieces came loose? Never mind the big chunk you took out of the part's edge, or the clear part that got cracked.

One of the first things you learned as your modeling skill set expanded – right after *No.11 blades are really, really sharp*, and *glue will stick to* you *as well as a lot of other things* – was to cut, rather than twist, the parts from the trees. It's still one of the most basic skills, and one that bears a second look.

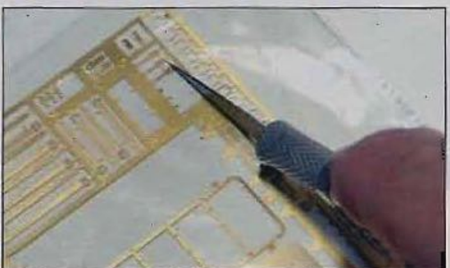
## RESIN



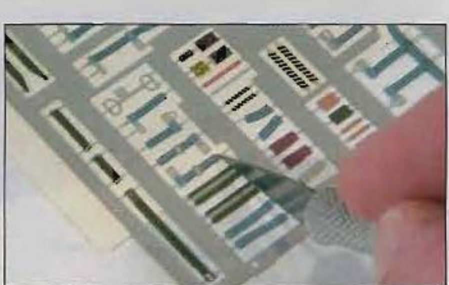
Resin parts almost always have pour plugs to be removed. A razor saw is the best weapon for this work, although large parts can be removed quickly with a carefully wielded cutoff wheel in a rotary tool. Work slowly and check often to be sure the blade hasn't gone off track.

Depending on how closely you cut, sanding is usually all you need to clean up resin parts. It's a good idea to wear respiratory and eye protection while cutting or sanding resin. The dust is very fine and can be irritating if inhaled.

## PHOTOETCHED METAL

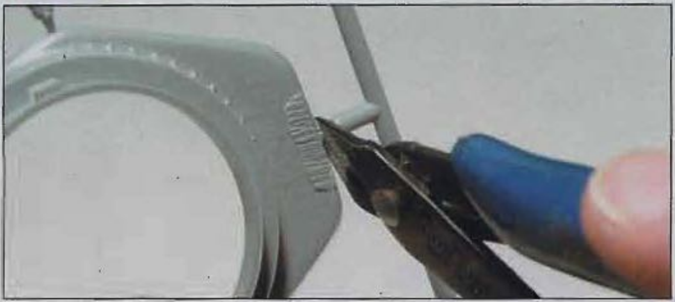


The thin strips that attach most photoetched-metal parts to frets are easily cut with a sharp knife. The main danger is sending the part orbital. Try cutting the part through the bag it came in. This keeps the part corralled until you can super glue it to the model.



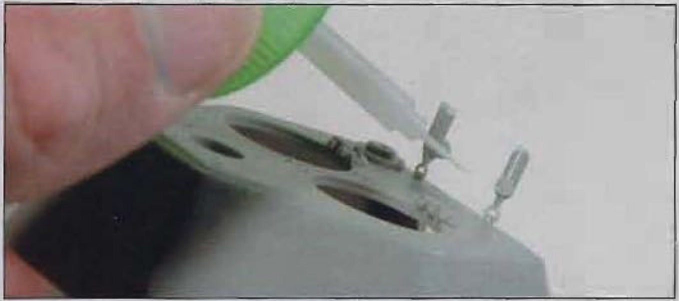
Alternatively, you can place the fret on the sticky part of a Post-it Note. The adhesive is strong enough to stop the part from taking off for parts unknown, but it lets go of the parts easily to prevent damage (and leaves little residue, better for the adhesion of paint and glue).

Photoetched-metal parts usually have small tabs where the attachment points were. A fine file, sanding stick, or whetstone will take care of those – but be careful not to bend or crimp the parts while you work.



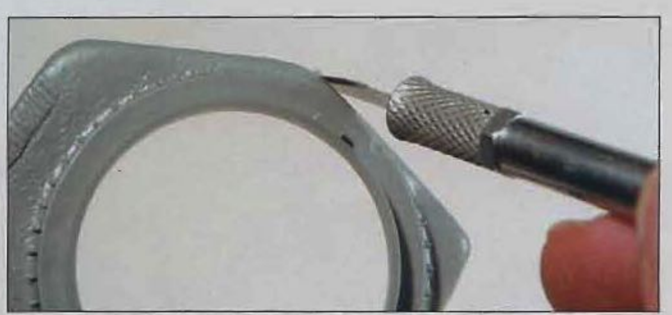
One of the best tools you can buy is a pair of side or sprue cutters. The blades should have a flat side and an angled side. With the cutters, it's a simple matter to place the flat side next to the part and cut the attachment point. It pays to be gentle and to look after your cutters. Use them only for plastic; things like metal and artificial flower stems will nick the blades, in turn damaging model parts.

Speaking of sanding: After using the side-cutters and hobby knife, it usually takes only a few swipes with a sanding stick to remove any remaining sprue. Go lightly and pay attention to where the abrasive touches the model.

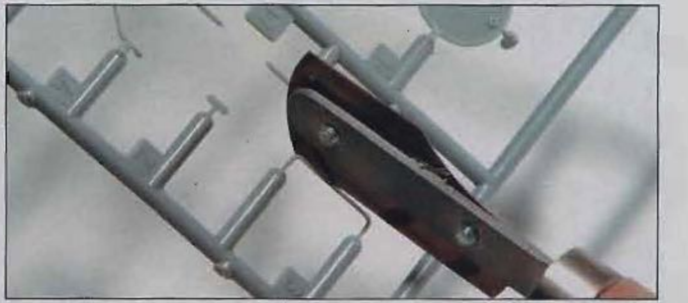


I've lost count of the number of small parts I've sacrificed to the carpet monster over the years. An easy way to avoid that is to make the parts bigger. When attaching small items like the lifting rings on a Dragon 1/35 scale T-34 turret, I cut off part of the sprue with the part. It serves as a handle when placing the part and applying glue.

Clear parts need a little TLC to ensure they reach the model unharmed. Clear plastic is much more brittle than regular styrene, so trimming it with sprue cutters can cause twisting or cracking, as on this 1/72 scale Italeri H-34 canopy that I messed up with careless handling.



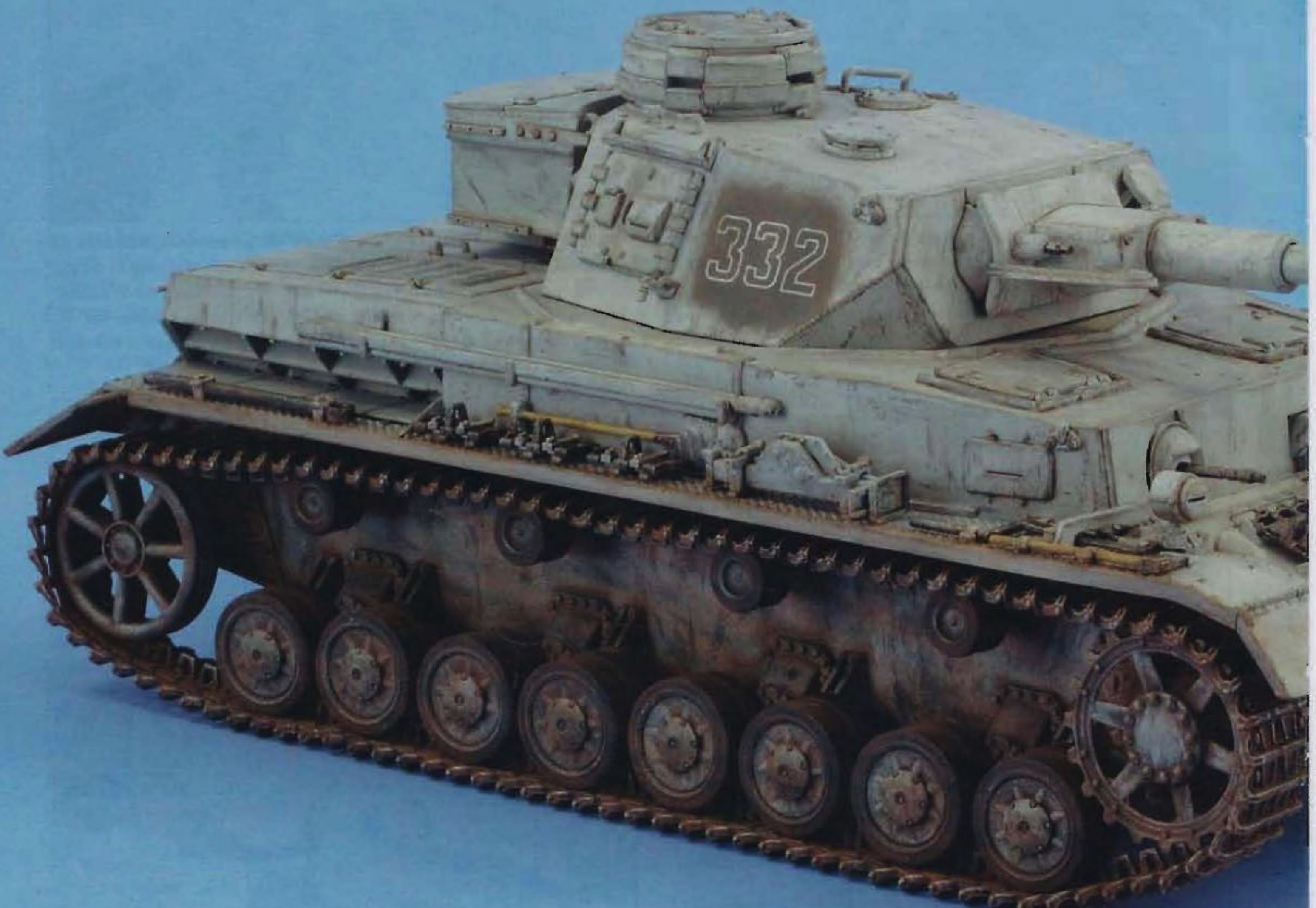
Next, I use a sharp No.11 blade to shave off the remaining little stub. Be careful. (Did I mention it's sharp?) If the plastic is soft, it is easy to cut too deeply and damage the part. My intention is to remove as much excess plastic as possible without cutting into the part. I find this lessens the amount of sanding I have to do, thus decreasing the amount of collateral damage to surrounding areas.



Because sprue cutters put pressure on the parts, there is a risk of breaking small, fragile items such as grab handles. A razor saw is a must here. Working slowly, it's easy to trim the part from the tree – and the cut is usually very clean.

Once the glue is try, I trim the extra plastic from the part and clean it up.

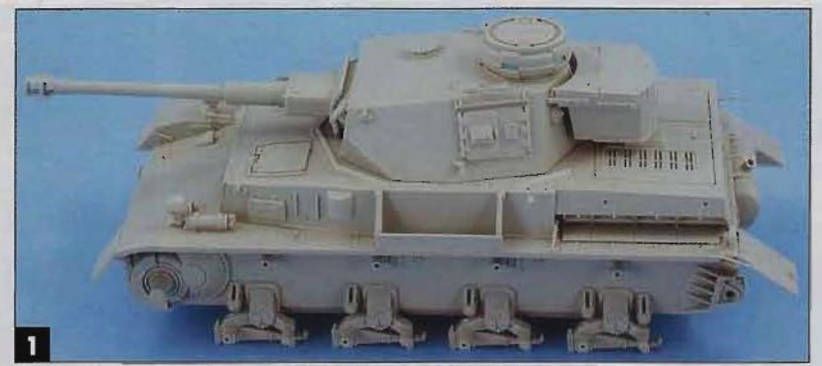
Using a razor saw to carefully cut the part from the sprue minimizes damage and reduces the amount of plastic that needs to be sanded off. This means less handling (and fewer fingerprints) before the parts reach the model. **FSM**



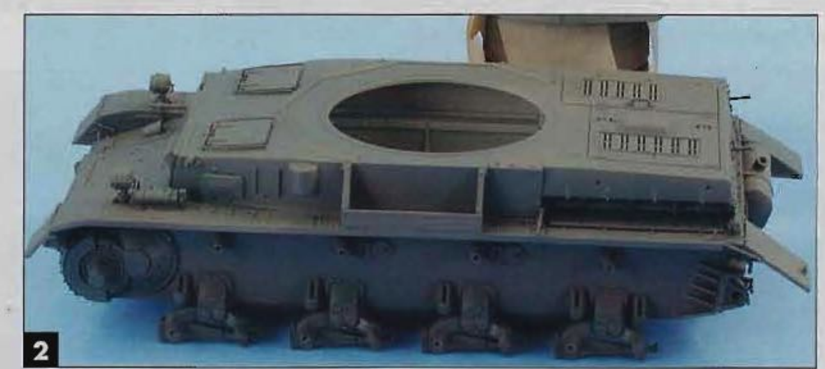
# Applying a WINTER WHITEWASH

BY BILL PLUNK

Bill added and then removed a variety of layers to give his Panzer IV a fitting finish.



Before any painting, Bill assembled the turret and hull of the tank.



The first coat was Model Master enamel Panzer schwarzgrau. Though this coat will be barely visible on the final model, it ensures all of the light gray plastic will be hidden.

A convincing whitewash scheme for armor can be a challenge, but paint and pastels produce amazing outcomes

After deciding to build Dragon's 1/35 scale Panzer IV Ausf G (No. 6549), and assign it to the 3rd Panzer Regiment "Totenkopf" in Kharkov, Ukraine, in early 1943, I realized a whitewash was needed to set the scene for a snowy climate. By adding elements, then removing or reducing them, I produced a layered result that gives the tank an overall wintry finish.

I began by building the Panzer IV straight from the box. I assembled the turret and hull, without the pioneer tools, the road wheels and running gear, and tracks, which are left off for later painting and detailing, **1**.

### Painting

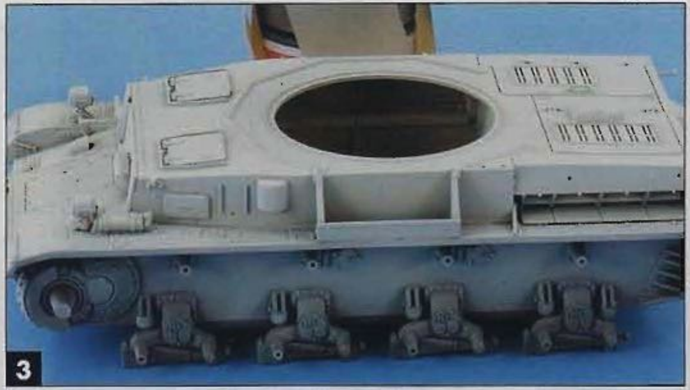
First, I airbrushed a base coat of Testors Model Master enamel Panzer schwarzgrau (all paints are Model Master enamels unless otherwise noted) and allowed it to dry before continuing on to the next coat, **2**. While this coat will be almost completely hidden on the final model, it ensures that all of the light gray plastic is painted and no bare spots are left behind.

Once the base coat is dry, I painted multiple, thin passes of light gray to build up the whitewash while allowing some of the underlying gray to show through, **3**. I use light gray instead of flat white because it's difficult to tone down a pure white finish. Plus, light gray is more complementary to the Panzer gray undercoat that will still peek through. The lower hull received fewer and lighter coats of the light gray than the upper hull, implying shadow by allowing more Panzer gray to be visible.

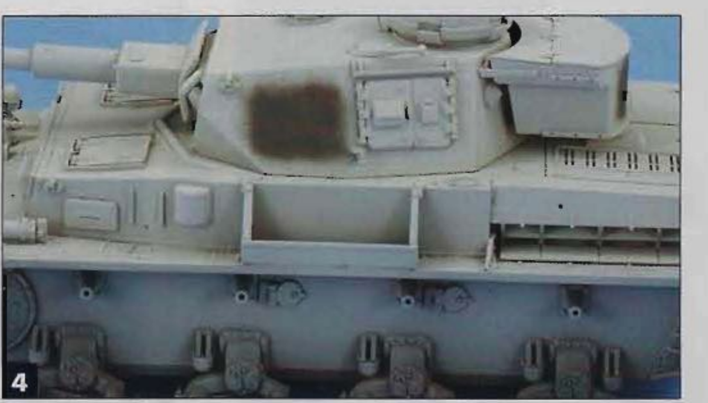
The turret numbers are white outlined numerals; I used a 15mm x 8mm template made from sheet styrene to paint black rectangles on the tank to simulate areas the crew would've left free of the whitewash for identification, **4**. The rectangle edges were feathered freehand with an airbrush to remove hard lines. I also airbrushed freehand black patches on the front and rear hull for the Totenkopf emblem, **5**.

### Beating up the tank

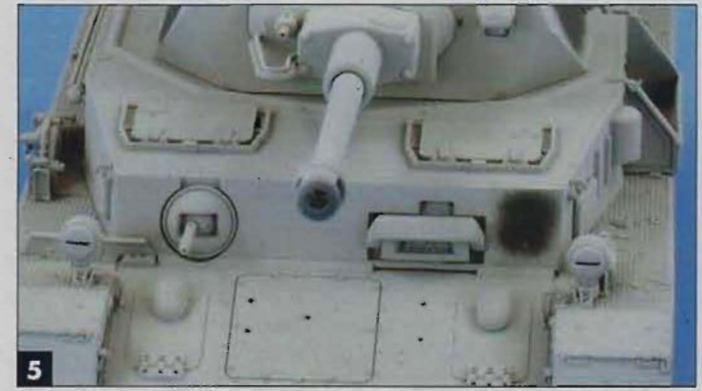
Now it's time to give the light gray coat the worn appearance of a whitewash that's still intact but doesn't look "painted on" and shows wear from the crew moving about its surfaces. To do this, I dry-brushed Panzer schwarzgrau using a round 0 sable brush all over the vehicle before installing the pioneer tools and other equipment. A counter dry-brush pass was also done with the light gray to blend in and soften areas where the Panzer schwarzgrau may have been too heavy or uniform. The undersides of the hull, in particular, received a heavier dry-brushing than the upper hull before the



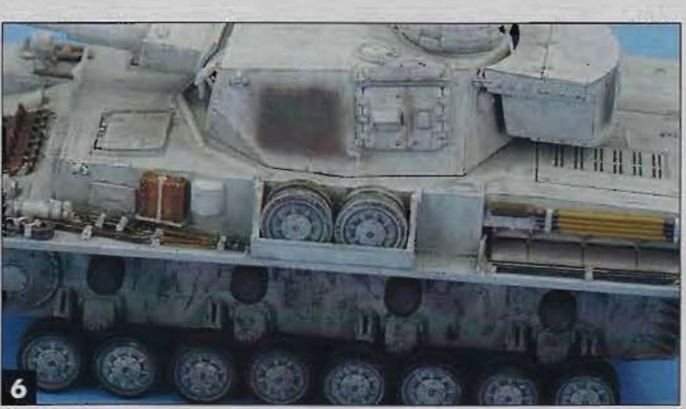
Next comes a coat of light gray to build up the whitewash. "I still allow some of the underlying Panzer gray to show through," says Bill.



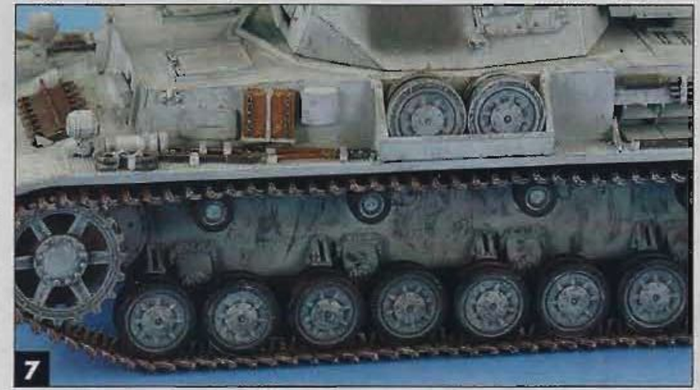
Bill airbrushed black rectangles on the turret where he would put numbers.



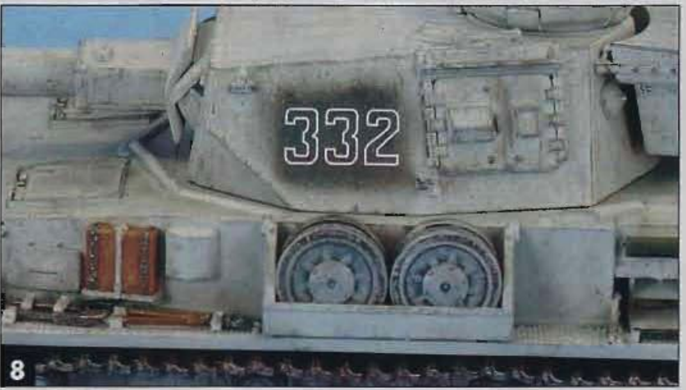
Black rectangles were also airbrushed on the front and rear hull for the tank's regimental emblem.



Bill dry-brushed Panzer and light gray to give the tank a beat-up look. Then, he installed the pioneer tools, road wheels, and running gear.



Tracks, sprockets, and idlers were weathered and painted before being installed on the tank.



Bill painted coats of Pledge Future floor polish before and after laying the decals for better adhesion and to seal them before more weathering.

road wheels were installed. This allowed me easier access to those areas, **6**.

Once that was complete, I installed the tracks, sprockets, and idlers, which were painted and weathered before installation. The parts were first painted with Panzer schwarzgrau, then dry-brushed with light gray, just like the turret and hull, **7**.

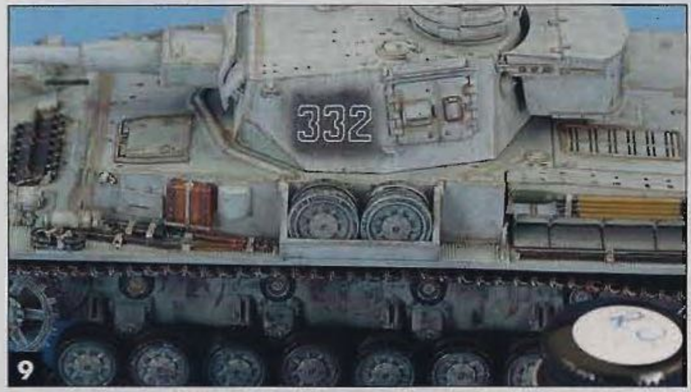
Before adding decals, I sprayed the entire vehicle with Pledge Future floor polish to provide a glossy, receptive surface for the decals and to protect the underlying finish. Solvaset decal solution helped the decals fit snugly to the turret and hull surfaces. A second coat of Future sealed them before the next weathering steps, **8**. The model should dry overnight before proceeding with more weathering.

## Final weathering

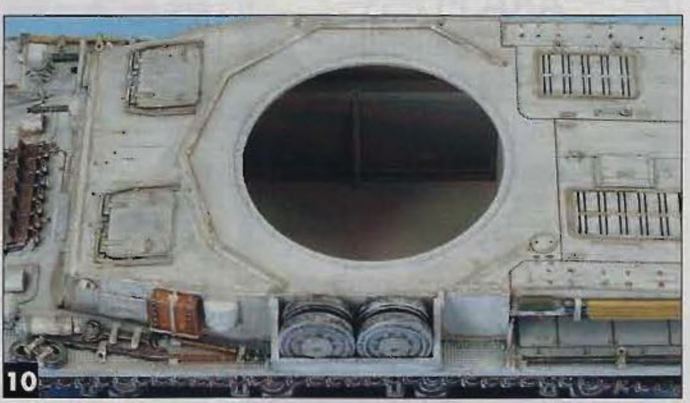
To bring out details and add depth to the finish, I added a pinwash of 10 percent Model Master raw umber enamel and 90 percent Model Master enamel thinner, **9**, applying it around raised detail, hull panel lines, and weld seams with a 3/0 pointed sable brush. The underlying Future allows the wash to flow more freely, taking full advantage of capillary action and allowing it to be fine-tuned and adjusted as needed.

After the wash was applied, I used the same 3/0 brush, along with a bottle of clean thinner, to adjust and remove the wash as appropriate, **10**. Working section by section over about 3 hours, I periodically wiped the brush on a paper towel to prevent residual paint buildup. When finished, the vehicle received an overall coat of Testors clear flat to seal it and eliminate the gloss of the Future coat, **11**.

To weather the running gear, I mixed equal parts Mig pigments dark mud (PO33) and Russian earth (PO34) with a 0 round sable brush. The dry powder mixes easily, but work carefully to avoid a mess.


9

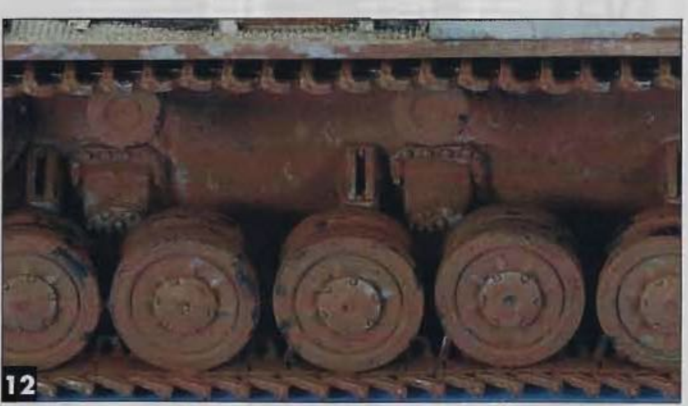
A pinwash of raw umber was added to bring out details in the finish.


10

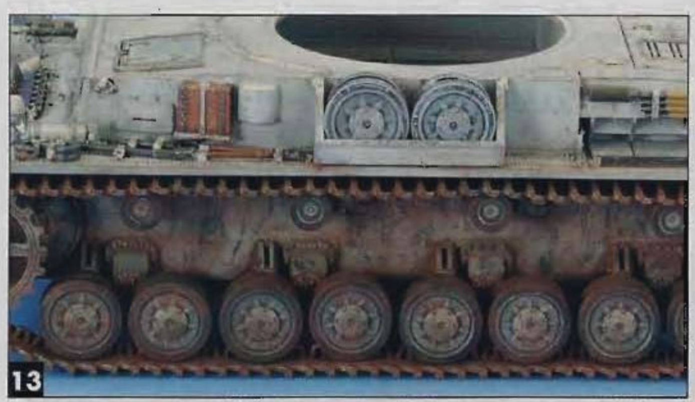
On the left side of this image, thinner has been applied to refine the pinwash, but not to the engine deck on the right.

11

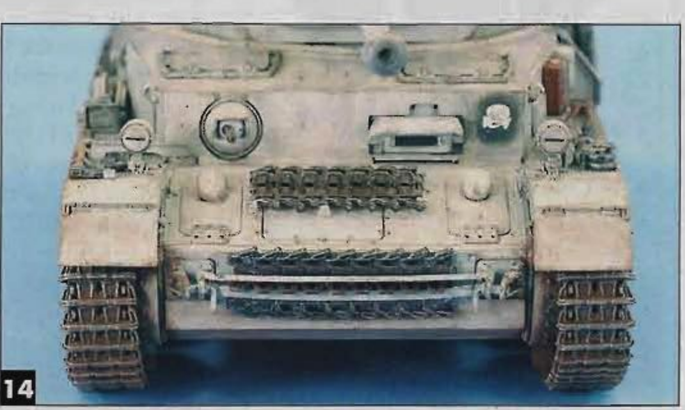
To dull the glossy Future, Bill painted an overall coat of Testors clear flat.


12

Mig pigments provided heavy weathering for the running gear.


13

Excess pigment was removed with paintbrushes and cotton swabs, roughening the surfaces to suggest wintry, muddy conditions.


14

To bring the tracks' muddy look into greater contrast and simulate natural wear, Bill dry-brushed steel on the exposed cleat surfaces.

With the powder mixed, I added tap water to create a wet, suspended mixture I applied using the same 0 round sable brush to muddy the lower hull, tracks, running gear, fenders, and front and rear hull. The key here is to provide a thick enough coating so the surface tension of the water is broken and the vehicle surface is covered as completely as possible.

The mixture was left to air-dry for a couple of hours and, as it dried, the resulting pigment color lightened substantially in shade, **12**. This is why, when choosing the wet method of application, it's important to work with a mix a shade darker than the standard dry shade as it appears in the bottle.

Excess pigments were removed using stiff-bristled brushes. (I always wear a mask during this step, because inhaling the pigment dust can have negative effects.) The "tooth" of the flat coat allows the finely ground pigments to slightly stain the undercoat and remain fixed once they dry. But it can still be adjusted using water and a combination of brushes and cotton swabs. The cotton swabs are dipped into water, then used to wash away and blend in the pigments. I use a scrubbing motion, altering the direction and keeping the pigments more concentrated around the suspension mounts. The wheel hubs and hull sides had almost all of their pigments removed in this process, with just enough left to suggest wintry, muddy conditions, **13**.

The final step involves dry-brushing the tracks steel on the exposed cleat surfaces. This slightly combines the paint and pigments and, once the paint dries, produces a unified finish that shows the metal contact surfaces in addition to the impacted mud and dirt from use, **15**.

Once complete, a whitewash serves as a convincing finish to place this Panzer on the bitter cold Eastern Front. **FSM**

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# Questions & Answers

## A clinic for your modeling problems

By Mark Hembree

### Joining vinyl tracks

**Q** I am building a 1/35 scale tank with vinyl track. What is the best way to join the ends of the track runs?
*Rich Jeffries*
*Smyrna, Tenn.*

**A** Some think vinyl tracks are easier than individual links, but I've found they're as tricky as any others (and harder to paint). They vary, too: Some call for a heat join, but unless the elasticity, length, and amount of vinyl at the join is just right it may not work. In one case, I wished I had gone straight to super glue; the heat didn't work, and it worsened the problem of the run being slightly short. Two or three beads of super glue produced a solid join, but it wasn't pretty (and, depending on the vinyl, it doesn't always work). If this happens, hide the ugliness under a rear wheel. I have also heard of stapling the joint; again, paint and placement hide the awful truth.

### Painting order

**Q** I've been modeling since I was a kid, but since subscribing to *FSM* and buying modeling books online I've noticed something about the various models that I never knew and am curious about. How do modelers prebuild sections of the model and know how all the other pieces fit together with it, then paint in all those hard-to-reach areas?

I've always painted each piece as I go, following the instructions. It seems that to go to the next level, there's a whole different process to build and paint. Is it just practice? Trial and error?

Is there a how-to article for this? Maybe you've covered it already in past issues.
*Daniel Buchmeier*
*Santa Monica, Calif.*

**HIDE THE UGLINESS UNDER A REAR WHEEL**

**A** We've certainly had plenty of articles about painting. However, they are usually fairly specific (e.g. painting figures, natural metal, invasion stripes, etc.) One piece that addressed your concerns was *FSM* Editor Matthew Usher's "Plan of Attack," in the January 2005 issue. This and other back issues are available online at FineScale.com or by calling customer service at 800-533-6644 (262-796-8776 for international callers).

To answer your question here: Some parts are easier to paint before placement. But you have to weigh that against the fact that unpainted parts bond better. The trick is planning your assembly for ease of construction and painting. There are tradeoffs between the two, and everyone does it a little differently. For instance, on a tracked armored vehicle, I would paint road wheels beforehand but try painting the tracks after assembling and fitting them. But some modelers assemble all the runnning gear (and stowage, too), install it on the vehicle, then paint it in place.

**Ship modelers paint complex assemblies from the bottom up and the inside out.**

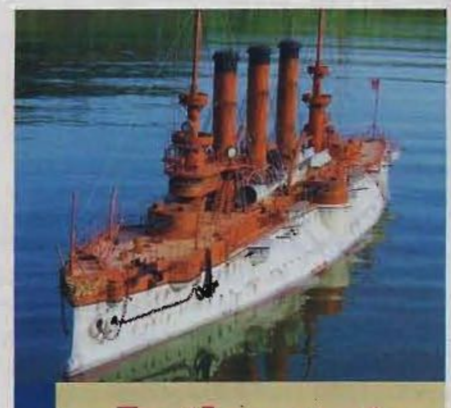
Still, I prefer to paint in subassemblies. Exactly how depends on the model — I look at the instructions and do what seems logical. I will depart from the instructions if it makes something easier. For instance, I wait to attach antennas, pitot tubes, machine guns, etc. until the very end so I don't keep knocking them off the model as I work. I add these "fiddly bits" at the end, usually removing a little paint at their contact points and super gluing them in place.

As a general guide to complex assemblies, do as shipbuilders do: Work from the inside out and from the bottom up.

### Chrome begone

**Q** What is the best way to prepare chrome-plated pieces to ensure the paint adheres?
*Fred Ameel*
*Doylestown, Penn.*

**A** The best way to prepare chrome-plated parts for paint is to remove the chrome plating. Soak the parts in bleach overnight, then use a soft brush (like an old toothbrush) to remove the plating. Now, some people use brake fluid; others use Easy-Off (really nasty stuff). But bleach will do the trick (and the cheaper the better). **FSM**



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# Reader Tips

## Solutions and innovations

By Aaron Skinner

### Old puck scores on rebound as glue koozie

After knocking over liquid cement bottles a couple of times, I decided to tip-proof the jar. I drilled out the center of a hockey puck with a 1½" hole saw. Now I can insert the cement bottle into the hole, making the fit tight with tape. There's no way it can tip over.

The setup has the added advantage of allowing the jar to be opened with one hand, thanks to the puck's weight and the rubber's grip on the workbench.

*– Jason Sloboda*
*Truro, Nova Scotia, Canada*

**So, you've got an old hockey puck lying around the house and you're not sure what to do with it. Jason turned one puck into a handy spill-proof holder for liquid cement bottles. Score!**

### Hands-free instruction manual

Finding a place for instruction sheets while working on models has always been a problem. If I lay the sheet on the workbench, it always seems to cover up a tool or part. A Christmas gift from my son solved the problem: the Double Flexi-Clamp made by the Daylight Co. One end clamps to my modeling table, and the other holds my instruction sheet. It is the handiest gift I have ever received.

*– Gordon D. King*
*Laconia, N.H.*

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**Always looking for a way to keep kit instructions handy, but off his tools and safe from spills, Gordon received the perfect thing as a gift: a Daylight Double Flexi-Clamp.**

### Toothpick painting

I like to use a toothpick to paint small details – its fine point is much more controllable than the bristles of a brush. The paint glides on flawlessly and shimmers with light. I find toothpicks much easier to paint with and to touch up difficult areas on a model.

*– Bonnie Greenblatt*
*Crawfordville, Fla.*

### Pigment ideas

I just read the story "The why and how of weathering powders" in *FSM* February 2010, and I have a couple of additional ideas:

1. Apply the pigments with a smaller, round brush, tap them onto the model, and work them into flat paint with a wider flat brush. This gives very fine control for subtle effects.

2. If you use acrylics for painting, mix pigments with paint thinner to a milky consistency. Then hold the brush close to the model and shoot air through your airbrush for realistic mud splatters.

*– Dave Manter*
*Fort Wayne, Ind.*

### Make custom sanding sticks

I make my own sanding sticks: I buy packages of wood or craft sticks in several sizes from a craft store and apply double-sided foam tape to them, cutting with a hobby knife. Next, I peel off the backing and apply the tape to a piece of wet-or-dry sandpaper of the grit I need, then cut the paper using the stick as a straightedge. I like to use 600-, 1,000-, and 1,500-grit sandpaper.

To use the sanding stick, I dab my finger in water, drop a little on the plastic model, and begin sanding.

*– Brad Smith*
*Fair Haven, N.J.*

### Junk mail: Masks, not trash

Use the 11" envelopes that lots of junkmail comes in to mask the wings of model aircraft.

Recently, I was painting a red nose on a natural-metal 1/48 scale P-51. I needed to mask off the already painted wings to protect them from overspray. Rather than worrying about low-tack tape and laborious masking, I cut the end off an envelope and slipped it over the wing all the way to the root, then lightly taped it against the fuselage. When I was done airbrushing, I simply slipped the envelope off. It can be used numerous times; I used the same envelope on a Bf 109 a few weeks later. Thicker or longer wings can be masked by taping two envelopes together lengthwise. So recycle junkmail envelopes – you'll feel better!

*– Mike Allen*
*Pensacola, Fla.*

### As seen on TV

The ShamWow – yes, that goofy, all-purpose drying cloth often seen in late-night television advertising – is perfect for drying scale model parts after washing in preparation for painting. I place the parts on the cloth, and the water is wicked away without leaving lint like the paper towels I used to use.

*– Steve Sliger*
*Greenwell Springs, La.*

### Alternative photoetched-metal glue

I have been experimenting with 3M 777 spray adhesive to attach photoetched-metal parts to plastic. The glue comes in an aero-

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*FSM readers are full of good ideas. For more creative solutions to modeling conundrums, and a database of tips from past issues, visit www.FineScale.com/How To/Tips Database.aspx.*

sol can and is available from hardware and home improvement stores.

I spray some of the glue onto a piece of paper, then use a very fine micro brush to apply the glue to the part. You don't need a lot, but it is necessary to entirely coat the attachment surface to seal the join. I find it easier and a lot less messy than super glue. I don't know if the glue affects paint, but I have taken the precaution of spraying pre-painted photoetched metal with Pledge Future floor polish to seal it.

*– Brian Hansen*
*Ripon, Wis.*

### How to solve an airbrush pickle

Airbrush cleaning stations keep the air you breathe cleaner, but they are expensive. I use a cheaper option, employing a pickle jar loosely filled with paper towels. I cut a hole in the lid of the jar big enough to insert the tip of my airbrush. Now, I can spray solvents and cleaners into the jar with little chance of it escaping into the atmosphere. The paper towels absorb most of the solvents, and the jar holds the fumes well. Periodically, depending on how often you paint and clean out your airbrush, you can change out the paper towels in the jar and dispose of them properly. This has saved me money and health concerns, and I hope it can help others.

*– Michael Bolz*
*Fairbanks, Alaska*

### Straighter wire for rigging

I wanted to follow up on something Robert Volpa said regarding the use of electrical wire for rigging in the February 2010 *FSM*. Robert says to be careful to avoid bending the wire. I've found you can remove most bends by rolling the wire between two hard, flat surfaces, such as a steel rule and a ceramic tile. Place the rule perpendicular to the wire to take out large bends, or lengthwise to straighten the entire piece.

*– Bob Wolfenden*
*Horsham, England, United Kingdom*

### Airbrush still spitting?

You've cleaned the airbrush out and you're sure there is no more residue inside, but paint is still spitting and sputtering out of the nozzle.

Try this if you are using acrylic paint: Mix your usual paint-to-thinner ratio, then add eight or so drops of Pledge Future floor polish. Spitting should stop and paint will go smoother. The only downside is the paint will have a slight shine which will need to be dulled down later.

*– Gabe Kicsak*
*Atwell, Western Australia, Australia*

### A bracing way to clean

I use small dental brushes (or brushpicks) designed for cleaning braces to clean my Iwata HP CS airbrush. The tiny head gets into all the nooks and crannies easily and gets my brush clean in half the time. Look for them online or at larger pharmacies.

*– Steve Wright*
*Sheffield, England, United Kingdom*

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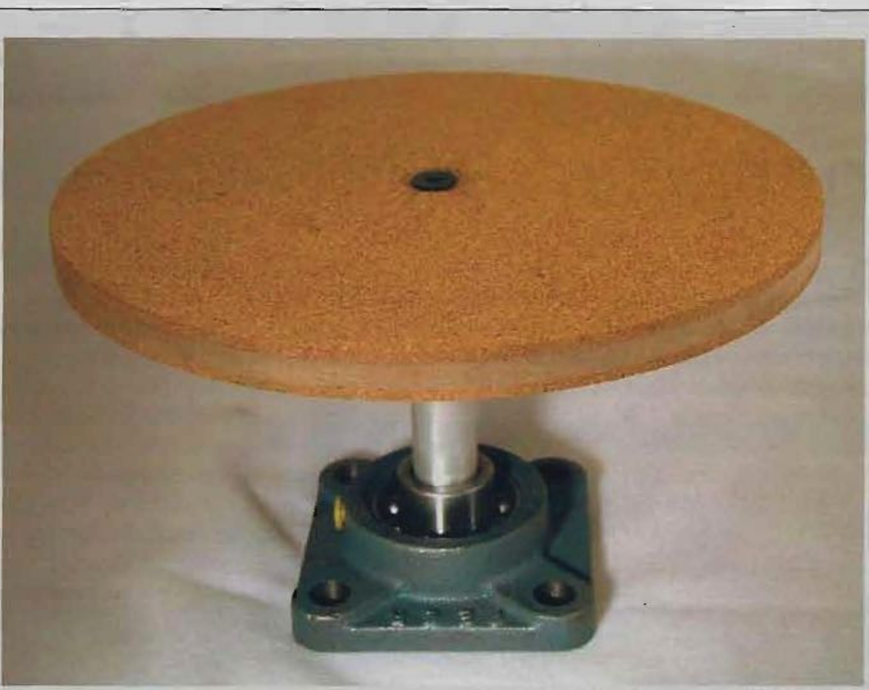
## Easy, adaptable turntable

After having trouble handling models while painting, I decided I needed a turntable to use in my spraybooth, so I made one.

First, I bought a four-bolt flange bearing with a ¾" bore. This bearing is very heavy and has a nice flat base, so it stays where you want it and there's little danger of it tipping. I'm in the industrial supply business, so I was able to order one, but look around online, at flea markets, or in catalogs to obtain a similar bearing.

Next, I removed the two rubber seals from the bearing, and used some degreaser to remove all of the packed in grease and allow the bearing to spin easier.

Then, I took a short scrap of round aluminum rod stock which I drilled and threaded to take a ¼" screw.


With a few pieces and a little ingenuity, Manny made this simple turntable to use in his spraybooth while painting.

The platform is made from cork coasters that I found at a dollar store. I drilled and countersunk a hole in the center of the coaster to receive a retaining screw. The cork is great because it allows you to stick pins into it to hold small parts

So, for an investment of about $6.00, I have a turntable.

*– Manny Kaneblei*
*York, Pa.*

100
RESCUE
USS CONSTELLATION

# Trumpeter's F-14D is one super Tomcat

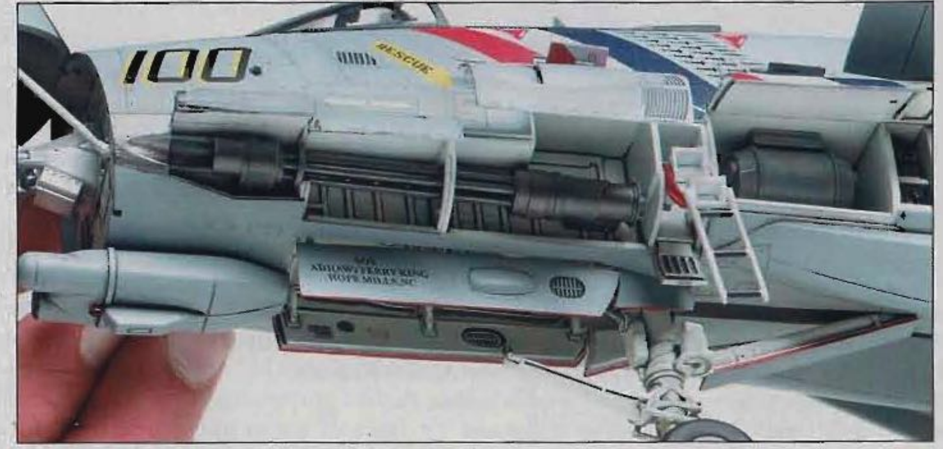
Trumpeter's new 1/32 scale Super Tomcat comprises a super-big pile of parts. The moldings are impressive, showing fine recessed panel lines and restrained rivet detail. There's a full complement of missiles: six AIM-54 Phoenix ("Buffalo"), two AIM-7 Sparrow, and two AIM-9L Sidewinders. Also provided are a pair of AIM-120 AMRAMM (not carried by the F-14D), an AN/AAQ-25 LANTIRN pod, a pair of laser-guided training rounds, and two fuel tanks.

The kit offers options when it comes to configuration, but only a few are fully shown in the instructions. There is with a decent rendition of the M61 Vulcan cannon, and separate panels to expose it, but the instructions have you close all of the panels. You can also deploy the refueling probe and display the detailed radar equipment, but this time the instructions don't indicate the model can be buttoned up.

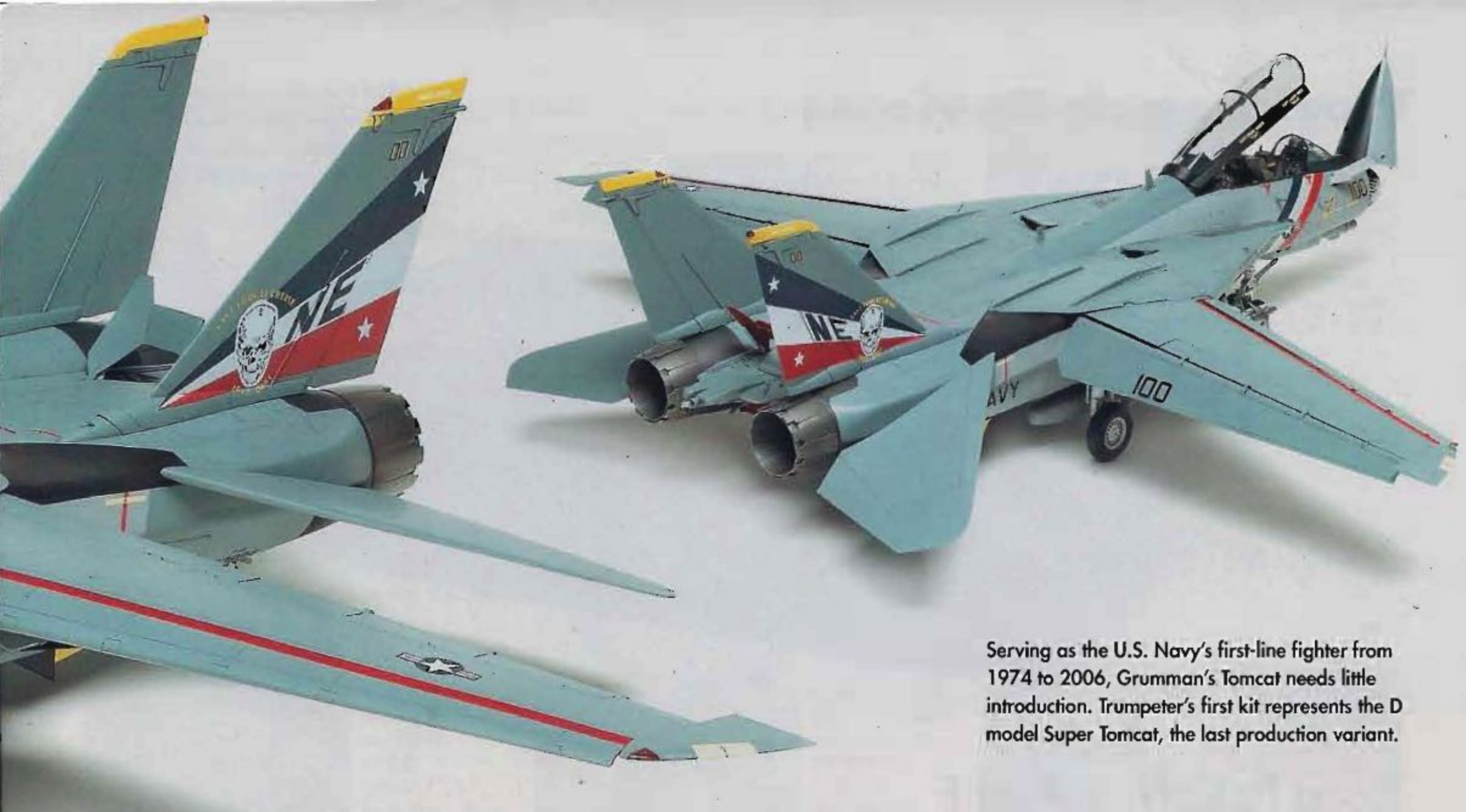
Trumpeter provides two well-detailed F110 engines. Each has 41 parts, not including the afterburner, and takes about an hour to build. I don't get why this much effort is put into molding engines without providing some way to see them in the finished model. I built only the main structure of the second engine and left off the accessories. Only the front of the engine and the exhaust with afterburner are visible when the model is complete. Trumpeter provides separate inner and outer exhaust petals in both dilated and compressed positions.

The cockpit is well detailed, with raised buttons, knobs, circuit breakers, scopes, and instruments. However, there are no rudder pedals (you'd have a hard time seeing them anyway), and no throttle handle.

The NACES seats are good, but the instructions for mounting the photoetched-metal harnesses are small and vague. A small joystick (Part S6) is shown mounted on the RIO's left side console, back behind his elbow. I couldn't find it in reference photos, so I left it out.



**Separate doors can be left open to display the M61 Vulcan cannon.**



Serving as the U.S. Navy's first-line fighter from 1974 to 2006, Grumman's Tomcat needs little introduction. Trumpeter's first kit represents the D model Super Tomcat, the last production variant.

The landing gear is beautiful. All struts have cast-metal cores that include the wheel axles for extra strength. Each main strut comprises 14 parts! The instructions show an optional compressed nose-gear assembly (poised for launch) but don't explain it. Tires are molded in black vinyl. There's a mounting tab on the nose gear strut for a landing light, but none is included in the kit. The multipart wheel wells are also well detailed.

Those big wings can be made to swing, although there is no gearing gimmick. Realistic pivot axles and push rods are provided; if you don't glue the wing assemblies to the pivots, they can swing fore and aft. However, if you mount the flaps down, there will be no swinging tonight!

Although the trailing-edge flaps are molded separately, there is no drawing to show them in the dropped position. It can be done; you just have to figure it out on your own. I didn't like the mounting system for the leading-edge slats. Each over-simplified retractor arm is a separate part and too thick to fit into the slots on the wing and slat.

The black vinyl parts for the top of the fuselage represent inflatable seals that keep the airflow steady when the wings are swept back. These must be attached with super glue.

With all these subassemblies, almost everything fit well (save for a little mismatch between the intake trunks and the undersides of the engine nacelles). The worst fits were the ventral fins, which were much thicker than the slots in the nacelles. I tried shaving them after a test fit but was unsuccessful. More shaving and sawing a couple of millimeters from the fin tops would help.

I painted my Tomcat with Testors Model Master enamels and Metalizers. Two large sheets of decals offer markings for three late F-14Ds: VF-213, VF-31, and my choice, VF-2. My sample's sheet had tiny bubbles in the clear coat. The missiles have their own set of decal stripes and stencils. All the decals are super thin; I found the best way to remove them from the sheet was to position each soaked item over its destination and quickly jerk the paper from underneath while applying light pressure on the decal with a moistened cotton swab.

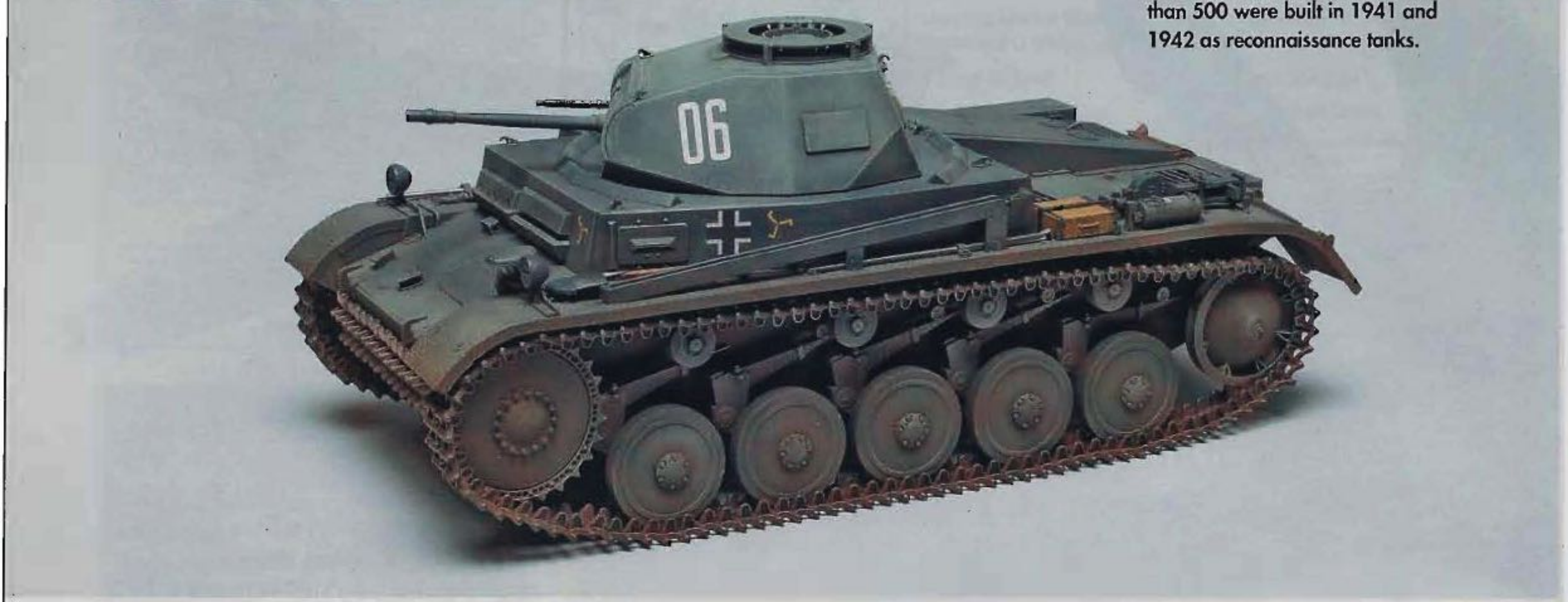
Final assembly included attaching the gun covers (they were hinged at the top), sensor probes, radome, and canopy. The canopy push rod's position is not clearly shown, and I'm still not sure that I have it right.

The big 'Cat looks super when finished. It takes up four square feet of shelf space! I was impressed by the fit overall and with the planning that went into providing all the detail in the Tomcat's complex structure. I wish the instructions had done a better job of showing available options and details. I devoted 52 hours to my "Top 'Cat," and I recommend it to all experienced builders.

*– Paul Boyer*

F-14D SUPER TOMCAT

**Kit:** No. 03203 **Scale:** 1/32
**Manufacturer:** Trumpeter, www.trumpeter-china.com, from Stevens International, 856-435-1555, www.stevenshobby.com **Price:** $229.95
**Comments:** Injection-molded, 598 parts (28 photoetched, 4 cast metal, 6 vinyl), decals **Pros:** Good recessed panel lines with little rivet detail; loads of options; detailed engines; good cockpit and seats; full missile complement; movable wings; deployable flaps and slats; sharp decals **Cons:** Missing throttle and rudder pedals; instructions do not fully explain options; missing information for detail painting; detailed engines hidden; ventral fins fit poorly



Ausf F was the last major production variant of the Panzer II. More than 500 were built in 1941 and 1942 as reconnaissance tanks.

# Tasca PzKpfw II Ausf F

Tasca surprised everyone by announcing a new kit of the Panzer II in the unusual (for armor models) scale of 1/24. While there have been a few military kits in this scale, they are rare.

The kit is molded in tan plastic. I was surprised to discover that interior parts are not provided, not even breeches for the guns. The kit does feature individual plastic track links assembled with metal pins; don't let the parts count scare you, more than half of the parts are for the tracks. A small photoetched-metal sheet includes the muffler screen, toolbox latches, and some of the tool brackets. Clear parts are provided for the periscopes and the headlights. The instruction booklet has very clear diagrams with helpful text and additional drawings to clarify parts placements. A separate painting and markings guide covers two Eastern Front vehicles, one in Panzer gray, the other in Panzer yellow and olive green. A small, well-printed decal sheet is provided for both vehicles.

**... HATCHES CAN BE POSED OPEN OR CLOSED ...**

Assembly starts with the lower hull, which is made from several flat plates; take care in assembly, as errors here will affect fit later on. It doesn't hurt to have some of the upper hull parts available to make sure everything is aligned before the glue sets. Take care in assembling the suspension arms, too. There are four different ones, and it is easy to get them mixed up. If you want a tow cable for the front deck, you'll have to make one yourself; the kit only provides the end moldings.

The upper hull is another multipiece assembly. All hatches can be posed open or closed and feature interior details – but with nothing inside the hull, you might as well glue them shut. I left off the running gear and did not install the tools or other small assemblies until after painting and decaling.

The radio antenna is held in place with a vinyl keeper, allowing you to pose it up or down. Before installing the top hull parts, I painted the inside of the hull flat black so bare plastic could not be seen through the large rear grates.

The turret is easy to assemble and fits well. However, the molding of the turret's machine-gun barrel is a little soft, surprising in this scale. I was also disappointed that none of the vision ports can be posed open.

I spent almost six hours assembling the tracks after first spraying them with a coat of NATO brown. Make sure that you make a right and left set of tracks (the only difference is which side the track-pin head is facing). You will also need to apply a dab of super glue to the head of each pin; otherwise they tend to fall out. I used 108 links on each side, as the instructions suggested. There are plenty of extra pins and track links provided.

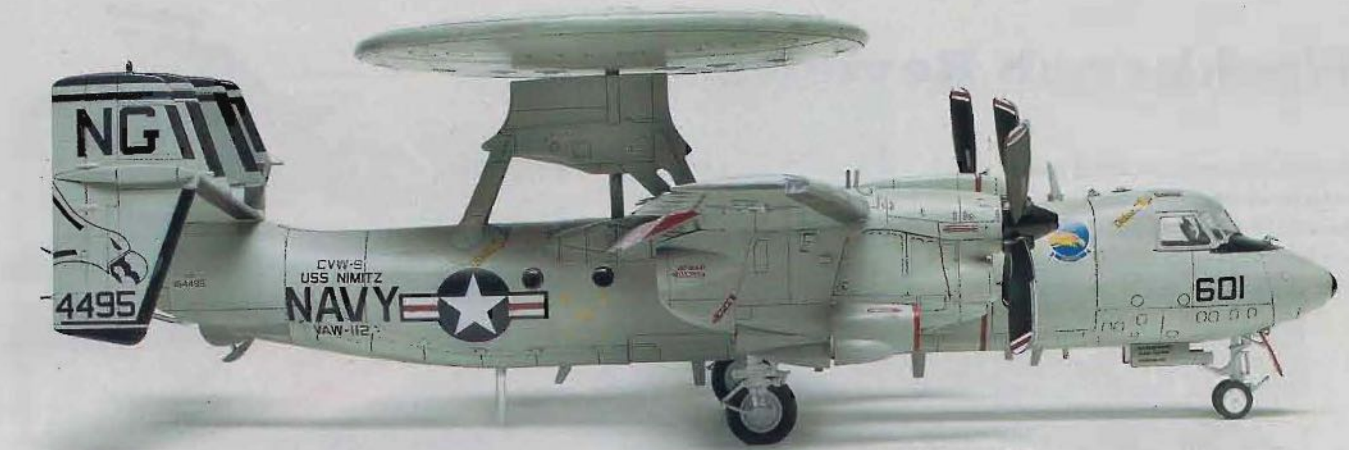
I spent nearly 24 hours building my Panzer II, and the finished model matches exactly the dimensions in David Doyle's *Standard Catalog of German Military Vehicles* (Krause). If you have assembled at least a few armor kits before, you should have no major problems with this one.

I really like the look of the finished kit, and the larger scale is perfect for these smaller tanks. While Tasca has already announced an Afrika Korps version of this kit, the success in this scale will depend on whether other companies jump on the bandwagon.

*–John Plzak*

1/24 GERMAN
Pz.Kpfw.II
Ausf.F
tasca

**Kit:** No. 24-001 **Scale:** 1/24
**Manufacturer:** Tasca, www.tasca-modellismo.com, from Pacific Coast Models, 707-538-4850, www.pacmodels.com **Price:** $79.95
**Comments:** Injection-molded, 979 parts (18 photoetched, 72 vinyl, 245 metal pins), decals **Pros:** Grand scale; individual-link tracks; good detail **Cons:** No interior parts; multipanel construction for hull; soft detail on the machine-gun barrel



The eyes and ears of carrier battle groups, Northrop Grumman's E-2C Hawkeye provides all-weather early warning as well as command and control.

# Kinetic Model Kits E-2C Hawkeye

I thought I would never see an injection-molded 1/48 scale E2-C. But now, thanks to Kinetic Model Kits, it exists! The densely packed kit box provides one clear and 13 light gray parts trees in two bags, respectively; my kit had a few loose and broken parts. Box art shows the actual aircraft readying to launch from a carrier.

Considering the size of the model, I was surprised there are only 207 injection-molded parts. Surface detail features engraved and raised panel lines and rivets; I found the panel lines and rivets a little heavy-handed for a newly tooled kit. The fuselage sprue attachments were rather thick; take care removing them to avoid extra work later.

Wheel well detail was busy looking, although there were some ejector-pin circles on the tops that would be hard to fix. The wheels are a three-piece assembly with a separate center hub and bulged tires.

The engines have nice intake ducting, including the prop drive shaft. Among the kit's nifty options are wings that can be built either folded or extended without any cutting! Strong spars are provided for building the wings in the flying configuration, but I kept them removable by not gluing the outer wing panels to them, making my Hawkeye much easier to transport. Other choices: separate flaps and ailerons that can be positioned up and partly down; crew boarding door can be open or closed; two styles of engine side panels; separate, posable propeller blades; even static wicks molded on all the control surfaces. (I only broke one off building the model!) The nose is molded in clear plastic so you only have to mask the landing-light cover to achieve realistic lights.

Designed by Fightertown Decals, the decal sheet was perfectly printed by Cartograf. The markings are for an E-2C of VAW-112 Golden Eagles aboard USS *Nimitz* in 1995. I was particularly impressed by all the complicated walkways for the tops of the wings and the propeller-tip warning stripes. However, considering the size of the box, I was disappointed by the small, hard-to-read instructions.

I started with the cockpit. The instrument panel and side consoles had fine raised detail, and Kinetic did a nice job on the control wheels. But the ejection seats were molded in one piece and lacked detail, as did the the rear cockpit bulkhead. I didn't spend much time painting the interior. The crew entry has an insert that must be painted if the model is going to be displayed with the door open.

The instructions call for 50 grams of nose weight, but with the wings folded, the quad tail fins, and the heavy, Frisbee-shaped rotodome – and little room in front of the cockpit – I skipped the nose weight and used a clear sprue stand to keep the model off its tail.

The fuselage and main wing assembly went together with no issues, although I did need filler around the bottom fuselage insert. The engine nacelle faces were slightly oversized compared to the nacelles. Be careful with the main landing gear: I tried my best to get it right and still managed to put the gear together with the wheel axles facing out instead of in. I was able to cut the lower oleo free with a razor saw to correct the gear. The rest of the kit went together as planned.

When it came time to paint, I did the black deicer boots on the wings and tail with Alclad II black primer. The next day, I masked the boots with Tamiya tape and used Testors Model Master gloss gull gray for the main color. After that dried, I gave the model a black sludge wash.

The Cartograf decals went on OK, settling down with small amounts of Mr. Mark Softer as needed, but they still silvered. The blue markings for the tops and bottoms of the rudders did not quite line up right; I touched up bare spots with a custom mix of Tamiya blue and flat black. The inner vertical-fin cap decals fit perfectly, though. Once all the decals were on, I applied a coat of Floquil flat clear (which is really more of a semigloss).

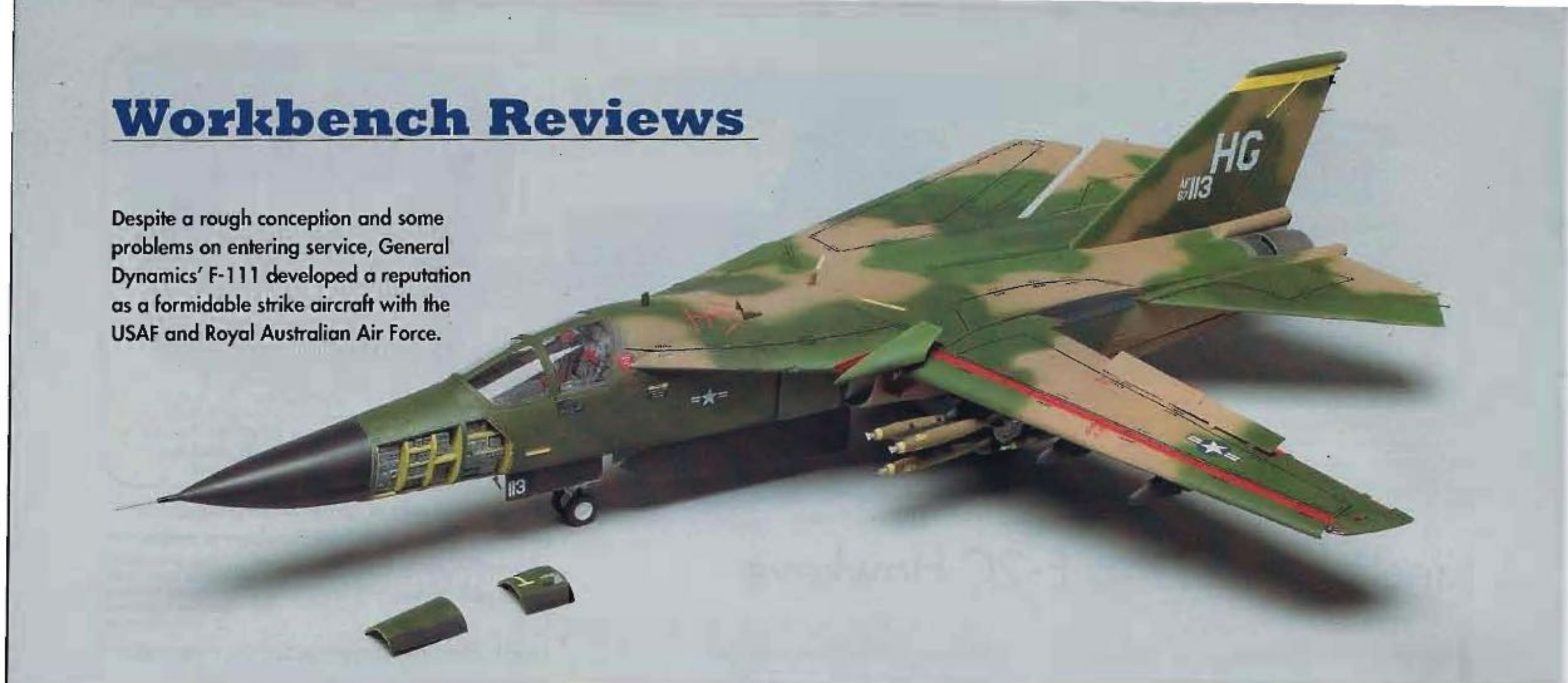
The finished model is impressive and captures the ungainly look of the Hawkeye. Scale measurements matched the full-size aircraft exactly! Based on the unused parts and parts breakdown, it's a sure bet Kinetic will be releasing the upgraded Hawkeye 2000, and maybe even the export versions.

I spent 35 hours on my E-2C, mainly on masking the deicer boots and applying all the decals, and would recommend it mainly to experienced modelers.

*–Jon Hergenrother*

E-2C
US NAVY E-2C HAWKEYE
NG
1:48

**Kit:** No. 48013 **Scale:** 1/48 **Manufacturer:** Kinetic Model Kits, www.kineticmodel.com, from Stevens International, 856-435-1555, www.stevenshobby.com **Price:** $94.95 **Comments:** Injection-molded, 207 parts, decals **Pros:** Well engineered with low parts count; ingeniously designed wing options; nice exterior detail; perfectly printed decals by Cartograf **Cons:** Flow lines visible in clear parts; barren cockpit; ejector marks in wheel wells; undersized, hard-to-read instructions



Despite a rough conception and some problems on entering service, General Dynamics' F-111 developed a reputation as a formidable strike aircraft with the USAF and Royal Australian Air Force.

# HobbyBoss F-111A Aardvark

I worked on the F-111D as an avionics tech in the late 1970s at Cannon AFB, so I think it's nice that HobbyBoss is covering the F-111 – and in a big way! The kit features detailed engines, avionics bays, cockpit, wheel wells, and vinyl tires. Markings include a preproduction and Vietnam War scheme.

Building the cockpit posed no issues. The instrument panel layout is not exactly correct for the A model. There are four instrument panels in the kit, and they all have a bit of artistic license in their layout compared with what was in the full-size aircraft. The ejection handles have been omitted, and the side walls have no detail. (However, aftermarket cockpits are now available for purists.) I applied the instrument decals to the panels, and they went down fine with Micro Set and Mr. Mark Softer.

**THE FLAPS, SLATS, AND SPOILERS CAN BE POSITIONED OPEN OR CLOSED**

HobbyBoss calls out the flat panel for the radar dish, but I believe the curved dish is correct for this early aircraft. (Phased array was not out yet.) I substituted parts C43 and C5 for the ones called out in the instructions. For the radars and the avionics facades, I painted Testors dark gull gray and Testors chromate yellow. The so-called "black boxes" – what we in the Air Force call LRUs (line replaceable units) were gray, not black like the F-102's.

The instructions show only the wings in the forward sweep, but inside the airframe there are two position pins, one for landings and takeoffs and one for full swept. The flaps, slats and spoilers can be positioned open or closed. I positioned one wing in full sweep and modified the wing glove (Part D31); the other is in landing/takeoff configuration to show what is possible. (On the real aircraft, the wings move in tandem.) Holes in the wings for the bomb racks will need to be filled in, depending on the wing position.

The TF30 engines have the fuel management module but not the associated plumbing. You would have to look to your references for the plumbing and wire layout.

On my kit sample, the escape capsule does not fit into the fuselage tub cleanly. The sides and front did not line up with the parting panel line, and slight gaps were present. I had to clamp mine in place and fill in the gaps. A suggestion would be for you to add sheet-styrene tabs along the sides to ensure alignment.

Arming the F-111 with Mk.82s, I noted that the MERs are not the ones made for the F-111. The F-111 had special racks made for it. Some of the weapons are for later periods and F-111 versions.

I chose the Vietnam markings and painted my Aardvark in the Southeast Asia camouflage scheme with Testors dark green, medium green, and dark tan over aircraft interior black. My reference for this review was *F-111 Aardvark*, by Bert Kinzey.

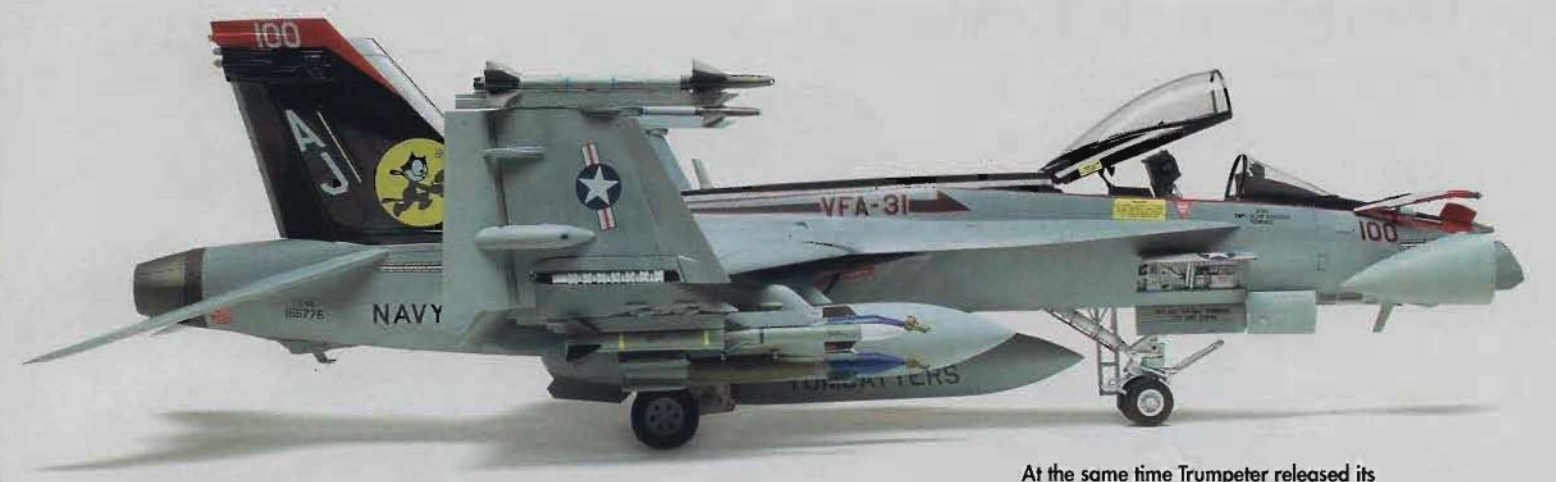
Modeler's note: In the 1970s and 1980s, these aircraft were routinely sent to the wash rack to be cleaned – even the wheel wells (that was my duty for a week) – and to the paint shop as needed, so they should not look unduly dirty or faded. They also flew with the SUU-20 practice bomb dispensers most of the time.

Because of the fit and complexity issues, I can only recommend this kit to experienced modelers. Glad to see the "Pig" (as we called it) out in plastic again. I'm looking forward to the release of the D and E variants so I can make one of the aircraft I maintained.

*– Tom Foti*

F-111A Aardvark

**Kit:** No. 80348 **Scale:** 1/48
**Manufacturer:** HobbyBoss, www.hobbyboss.com, available from Squadron Mail Order, 877-414-0434, www.squadron.com **Price:** $109.99
**Comments:** Injection-molded, 437 parts (4 vinyl), decals **Pros:** New mold; detailed avionics bays and wheel wells; positional canopy hatches **Cons:** Poor fit of the escape capsule; detail omitted or simplified; wrong type of MER



**At the same time Trumpeter released its 1/32 scale Tomcat, it also issued a big-scale kit of the F-14's replacement on U.S. carriers, the Super Hornet.**

# Trumpeter F/A-18-E Super Hornet

BIG: That's Trumpeter's 1/32 scale Super Hornet. Measuring more than 1' 9" long, with a wingspan of nearly a 1' 6" with the wings down, this bad boy will take up a lot of space on your display shelf. However, its size does not take away from the detail or the quality of the 645 parts.

Tightly packed into the large box are 15 sprues for the airframe and an additional 22 sprues for the ordnance (boxed separately), as well as four vinyl tires, a photoetched-metal fret, four clear parts sprues, and three metal landing gear strengtheners.

It's not easy to decide which of three beautiful CAG birds you want to build: Bureau Number 166776, VFA-31, Tomcatters; Bureau Number 166608, VFA-143, Pukin' Dogs; or Bureau Number 165860, VFA-27, Royal Maces. Decals for the jet are nicely laid out on two decal sheets. An additional decal sheet is included for the ordnance.

Included is an APG-79 AESA radar that can be exposed; leading- and trailing-edge flaps can be positioned up or down; wings have the option of being folded; stabilizers and ailerons are positionable; and the refueling probe can be exposed as well. A boarding ladder can be added, and two avionics bays can be exposed also. It seems the options for this model are endless.

Instructions are laid out like most other Trumpeter kits. The 23 pages and 30 steps are easy to follow and are broken down so you won't need to deviate from them. A parts map is included in the main instructions book, as well as an ordnance placement guide. A separate, full-color paint and decal placement guide helps with colors and markings. Unlike some of Trumpeter's other offerings in 1/32 scale, the Super Hornet is an easy build.

Surface detail is outstanding, but detail is lacking in the cockpit and wheel wells. Trumpeter did include photoetched-metal seat belts, which adds some detail to the NACES ejection seat. Two complete engines are included and build up nicely – but they won't be seen after the fuselage is closed.

For a model this size, I was surprised at how well the parts fit. Some filler will be needed where the upper and lower fuselage halves meet, and in the intakes to make them look seamless. Attaching the horizontal stabilizers can be tricky because there really isn't much of a post on the stabilizer to attach to the fuselage. I would recommend adding a post to help strengthen that joint. I was pleased to see that the kit came with metal landing gear strengtheners. This model is heavy!

A plethora of ordnance is included in this kit: four AIM-120Bs; two AGM-84As; two AGM-84Hs; two AGM-84Es; two AGM-154s; six GBU-22s; six GBU-12s; two LTGRs; six ADM-141s; and three different targeting pods. However, the Super Hornet does not carry GBU-22s. I was disappointed there were no JDAMs (GBU-31 and GBU-38), which the Super Hornet often carries.

I sprayed the underside with Model Master light ghost gray, the upper fuselage with Model Master dark ghost gray darkened with a couple drops of black, and decanted Tamiya gloss black for the black spine of aircraft.

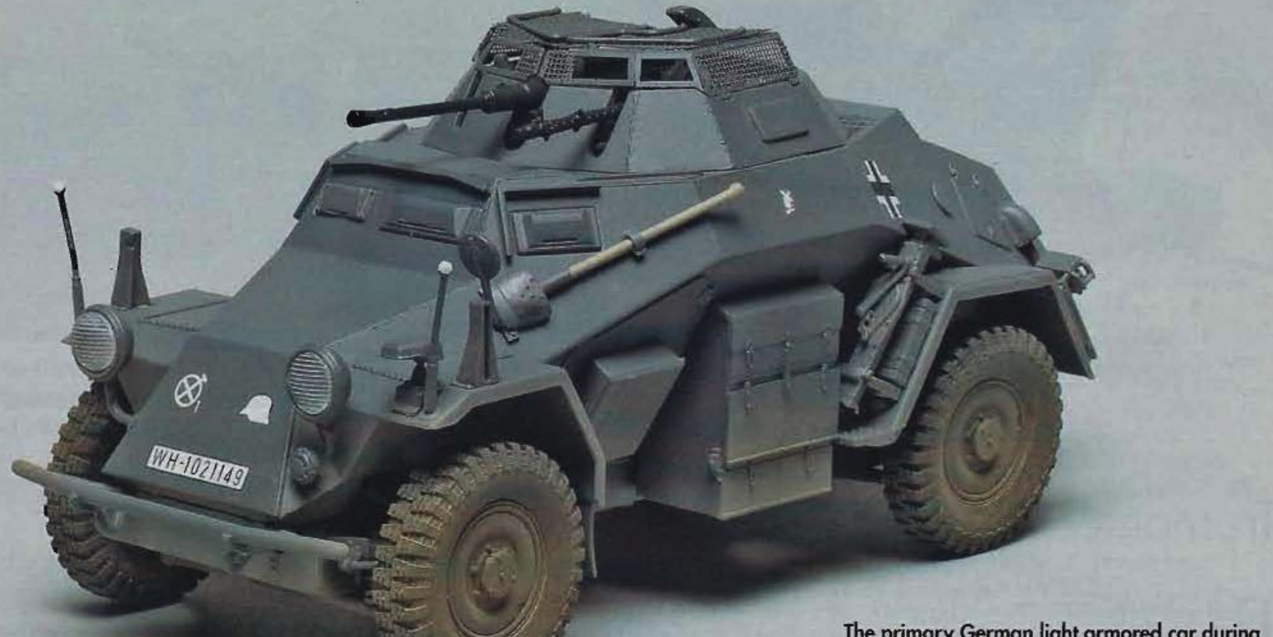
Be warned, the decals are extremely thin and tend to fold in on themselves (especially the larger decals). I did not attempt to use the red pinstripe decals that border the black spine; I masked and painted them instead. The plus side of the decals being so thin is they settle into rivet detail with little or no solvent needed.

My "Super Bug" took me 70 hours to build, about par for a model of this size. With the kit being much more simplified than other 1/32 scale Trumpeter kits, someone with a couple of years' modeling experience should have no problem turning out a great-looking Hornet. I had a blast building this beast!

*– Chris Oglesby*

F/A-18E SUPER HORNET

**Kit:** No. 03204 **Scale:** 1/32 **Manufacturer:** Trumpeter, www.trumpeter-china.com, from Stevens International, 856-435-1555, www.stevenshobby.com **Price:** $229.95 **Comments:** Injection-molded, 645 parts (4 vinyl, 3 metal strengtheners, 8 photoetched metal), decals **Pros:** First one in this scale; outstanding molded detail; great choice of markings; strengtheners for landing gear **Cons:** Some unusable ordnance, but JDAMs not included; decals tended to fold in on themselves; lack of detail in the cockpit and wheel wells



The primary German light armored car during World War II, the SdKfz 222 participated in all major actions with the German army.

# Tristar SdKfz 222 Leichter Panzerspähwagen

Tristar's kit is one of two new kits of the SdKfz 222 slated for this year. The kit is cleanly molded in dark yellow plastic. Details include vinyl tires, interior detailing, and photoetched-metal parts.

I started assembly with construction of the frame. There are a fair number of parts within this assembly and the subsequent suspension, drivetrain, steering linkage, and transmission. All these take time but are problem-free. The suspension is posable, but not workable as it comes from the box.

**THE VISION PORTS HAVE CLEAR LENSES ...**

The armored hull is divided into top and bottom halves. The lower half has interior detailing from the driver station to the engine fire wall. The access hatches are separate, allowing all the detail to be seen. Surprisingly, fire-wall screening is not provided in photoetched metal but merely molded in.

All of the engine access hatches are separate parts. The vision ports have clear lenses and details that represent mounts and hinges, although the instructions do not detail how to display them open.

The vehicle's main armament of one 20mm cannon and 7.92 machine are captured in a neatly detailed subassembly. Take care in lining up all the parts, as the gun mount does not directly attach to the turret and there could be a problem with the guns not aligning with the opening for it in the turret.

The turret's anti-grenade covers are constructed from photoetched metal. The two frames need to be carefully bent to shape in order to properly attach to the turret.

Bringing the gun mount and turret together results in a tight fit with all that detail crammed into such a small space. I needed to "uninstall" the turret radio and fish it back into place after the gun mount and turret were in place.

I painted my 222 with a combination of Tamiya spray and acrylic paints. Decals are provided for three vehicles, including an interesting Hungarian scheme. The decals performed very well with a bit of decal solution.

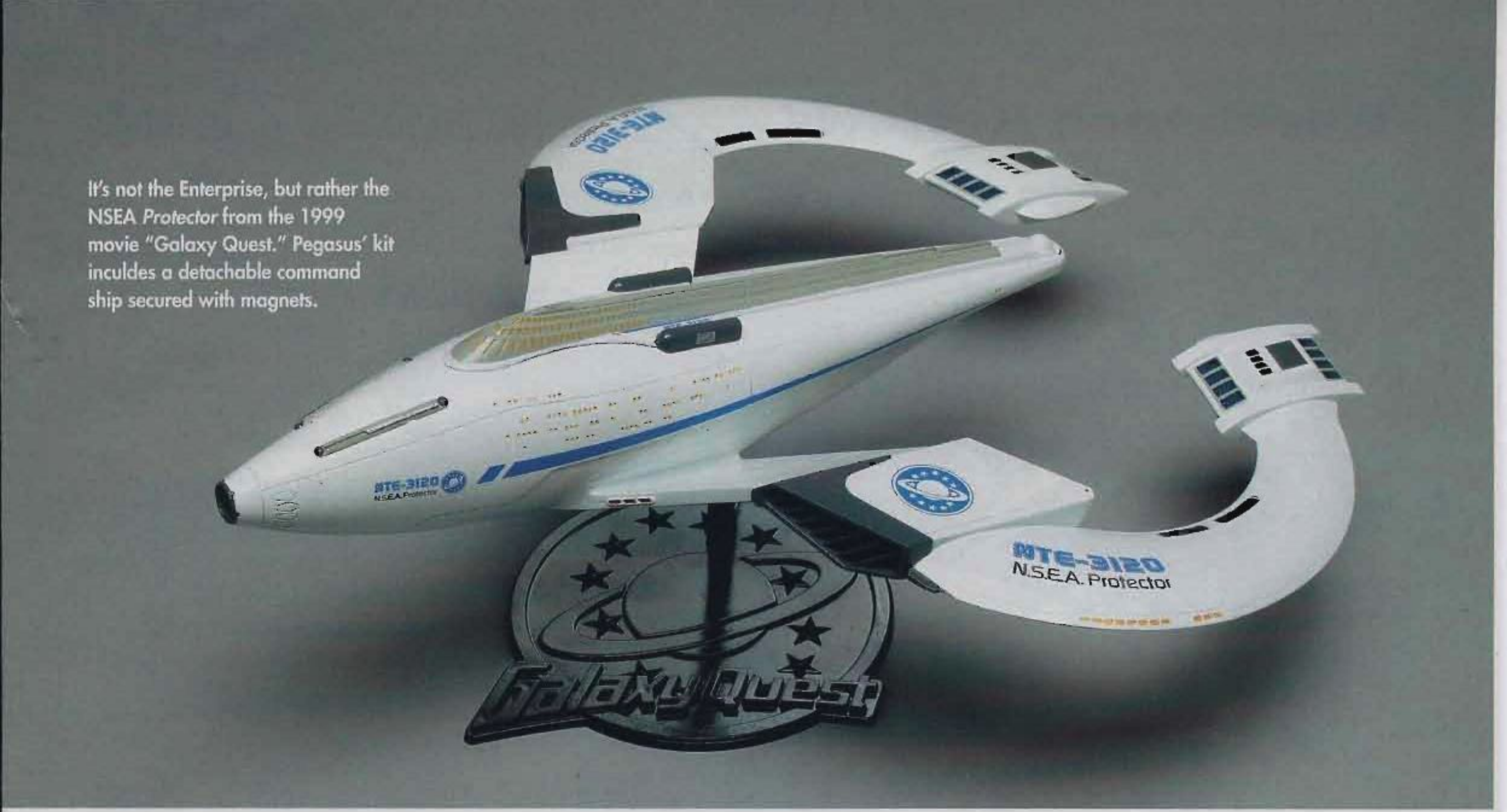
My primary reference was a Web site dedicated to the SdKfz 222, appropriately named sdkfz222.org.uk. I also drew upon the old standby – *The Encyclopedia of German Tanks of World War Two* (Doyle, Chamberlain, and Jentz; Sterling Publishing). The completed model looks good when compared to the references I consulted.

I completed my SdKfz 222 in a relatively short 15 hours and found that it was a truly fun build. While not a kit for novices, most modelers should be able to handle the intricate detail and enjoy Tristar's new kit.

*–Jim Zeske*

German Leichter Panzerspähwagen
(2cm) Mid. Version
043
Sd.Kfz.222

**Kit:** No. 043 **Scale:** 1/35
**Manufacturer:** Tristar Model, www.tristar-model.com, from Pacific Coast Models, 707-538-4850, www.pacmodels.com **Price:** $47.15
**Comments:** Injection-molded, 234 parts (14 photoetched, 4 vinyl), decals
**Pros:** Detailed suspension; good fits all around **Cons:** None



It's not the Enterprise, but rather the NSEA *Protector* from the 1999 movie "Galaxy Quest." Pegasus' kit inculdes a detachable command ship secured with magnets.

# Pegasus "Galaxy Quest" NSEA *Protector*

As a self-described "Star Trek" geek, I loved "Galaxy Quest." The 1999 movie paid homage and poked good-natured fun at "Star Trek" and its fans. And as a modeler, I have always enjoyed the scene near the climax when fanboy Brandon is holed up in his room building a model of the fictional show's ship NSEA *Protector*; I've wanted to build my own model of the ship since then.

Thanks to Pegasus Models, my wish has come true with a 1/1400 scale *Protector*.

Molded in heavy, gray plastic, the kit's 40 parts show good engraved surface detail, including panel lines and windows. Clear blue parts provide engine intakes and exhausts.

Although the kit is not advertised as a snap-together model, most of the parts feature large locating pins that securely lock the joins.

The command ship is designed to separate from the main hull as seen at the movie's end. Pegasus included magnets, but there is no mention of them in the instructions.

A display stand emblazoned with a "Galaxy Quest" logo and fitted with a ball and socket head allows the model to be displayed at various angles.

Well-printed decals provide all the markings, and a clear four-view diagram explains painting.

I started by installing the magnets. Be mindful of the polarity to avoid repelling the command section from the main ship. Pegasus marked one side of the disk magnets to indicate the polarity, and I checked and re-checked them before commiting them to super glue.

Under the heading "Painting Guide," the instructions note that the kit is molded in ABS plastic, so methyl ethyl ketone-based glues, like Testors liquid cement, will not work. It recommends Tamiya extra thin cement, Model Master liquid cement, or super glue for construction.

Most of the parts fit well. After painting the back of the clear blue parts chrome silver, I sprayed the engine exhaust ends white, then installed the blue parts and masked them. I used white Tamiya fine surface primer for the body color, and Xtracrylic light gull gray and Tamiya dark sea gray for the details.

The only minor hurdle is the engine intakes. I painted the grilles off the model then attached them to the model, capturing the clear blue inserts. After filling an obvious seam, I masked the fronts and painted the intake area.

I colored the windows with lightly thinned yellow paint applied with a fine brush and toothpick.

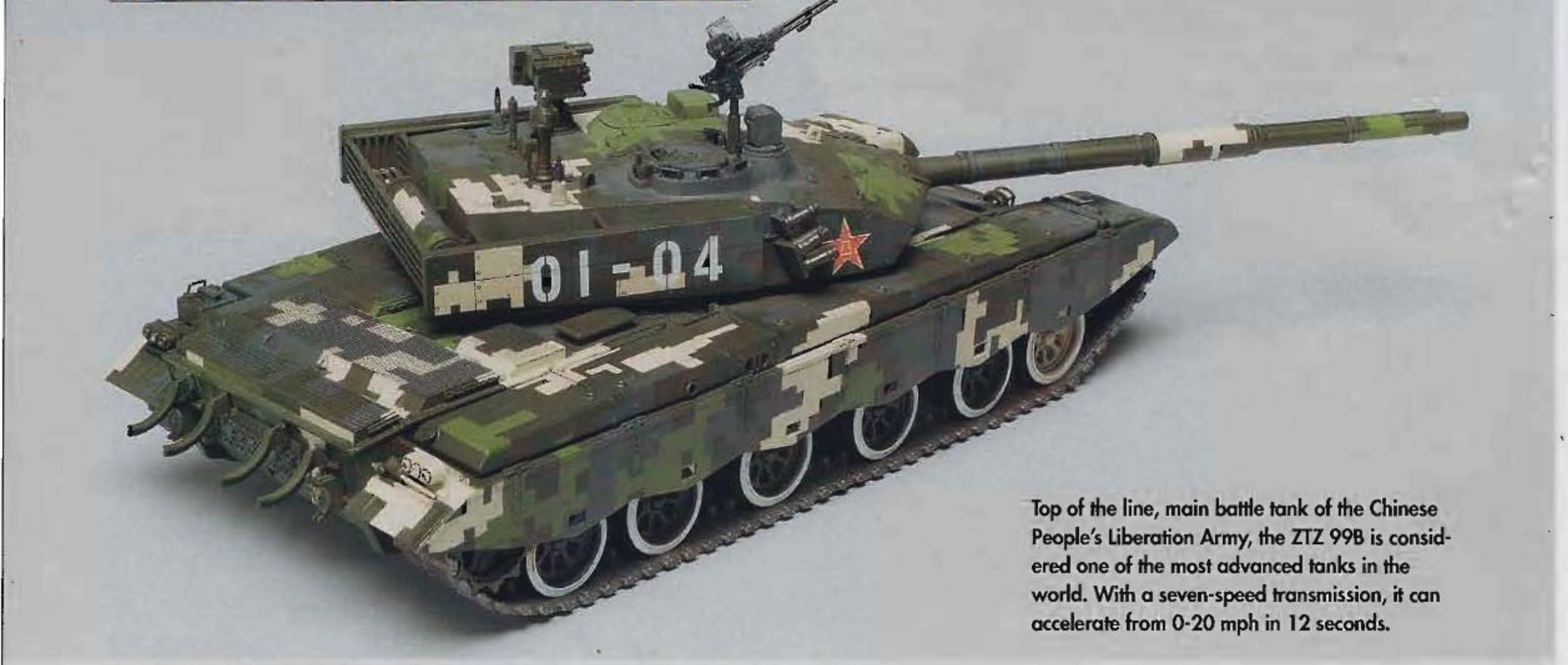
The decals are thin and laid down beautifully over a coat of Pledge Future floor polish, adding a dash of color to the white and gray livery.

I spent about 12 hours on my *Protector* – much of that getting the white right – and it looks like the movie ship. My advice to modelers with a favorite vehicle that's never been kitted: *Never give up, never surrender!*

– *Aaron Skinner*

GalaxyQuest
NTE-3120
N.S.E.A. Protector

**Kit:** No. 9004 **Scale:** 1/1400
**Manufacturer:** Pegasus Hobbies, 909-982-6507, www.pegasushobbies.com
**Price:** $29.99 **Comments:** Injection-molded, 40 parts, decals, display stand
**Pros:** Easy, almost snap-together construction; magnets included to secure command ship; clear painting instructions; good shapes; terrific decals **Cons:** Gaps on intakes complicate installation of clear parts; ejector pin marks mar rear panel at engine intakes



Top of the line, main battle tank of the Chinese People's Liberation Army, the ZTZ 99B is considered one of the most advanced tanks in the world. With a seven-speed transmission, it can accelerate from 0-20 mph in 12 seconds.

# HobbyBoss Chinese ZTZ-99B MBT

Other than a few kits of Chinese-built T-55s, models of People's Liberation Army equipment has been almost impossible to find. HobbyBoss and Bronco are moving to fill that gap, with the former releasing several armored fighting vehicles, including China's newest tank, the ZTZ-99.

HobbyBoss' third kit is the B variant, which features appliqué armor and a snazzy digital camouflage scheme that debuted during the 2009 PLA 60th anniversary parade.

Molded in light gray plastic, the parts have good detail with crisp edges and sharp rivets.

The lower hull features torsion-bar troughs, with well-rendered, separate road wheel arms and other suspension details.

**... AND A SNAZZY DIGITAL CAMOUFLAGE**

A small fret provides photoetched-metal grilles for the engine deck's four openings, but no clear parts are included for the lights, sight optics, or vision blocks.

Decals provide markings for three PLA tanks, two in a three-color splotchy camo, and one in digital camo. In addition to color five-view diagrams of each vehicle, a 1/35 scale black-and-white version of the digital scheme that makes it easier to measure areas for masking.

When building tanks, I usually leave the running gear off but add everything else, including tools and stowage, before painting. The ZTZ's fender skirts and complex paint scheme required a change.

First, I assembled the lower hull, including road wheel arms, but left off the wheels and skirts as well as small bits like tow hooks and lights that would be difficult to mask around.

The only problem during construction was a warp in the gun barrel. I used just a touch of Mr. Surfacer 500 to fill minor gaps elsewhere.

After spraying the hull olive drab, I painted and assembled the wheels. For the digital scheme, the wheels should have white walls; it's shown in the diagrams, but never called out. With the running gear on, I assembled the individual-link tracks; they didn't need a lot of cleanup and went together easily. After painting the tracks, I attached them and the skirts, then masked off the lower hull and running gear.

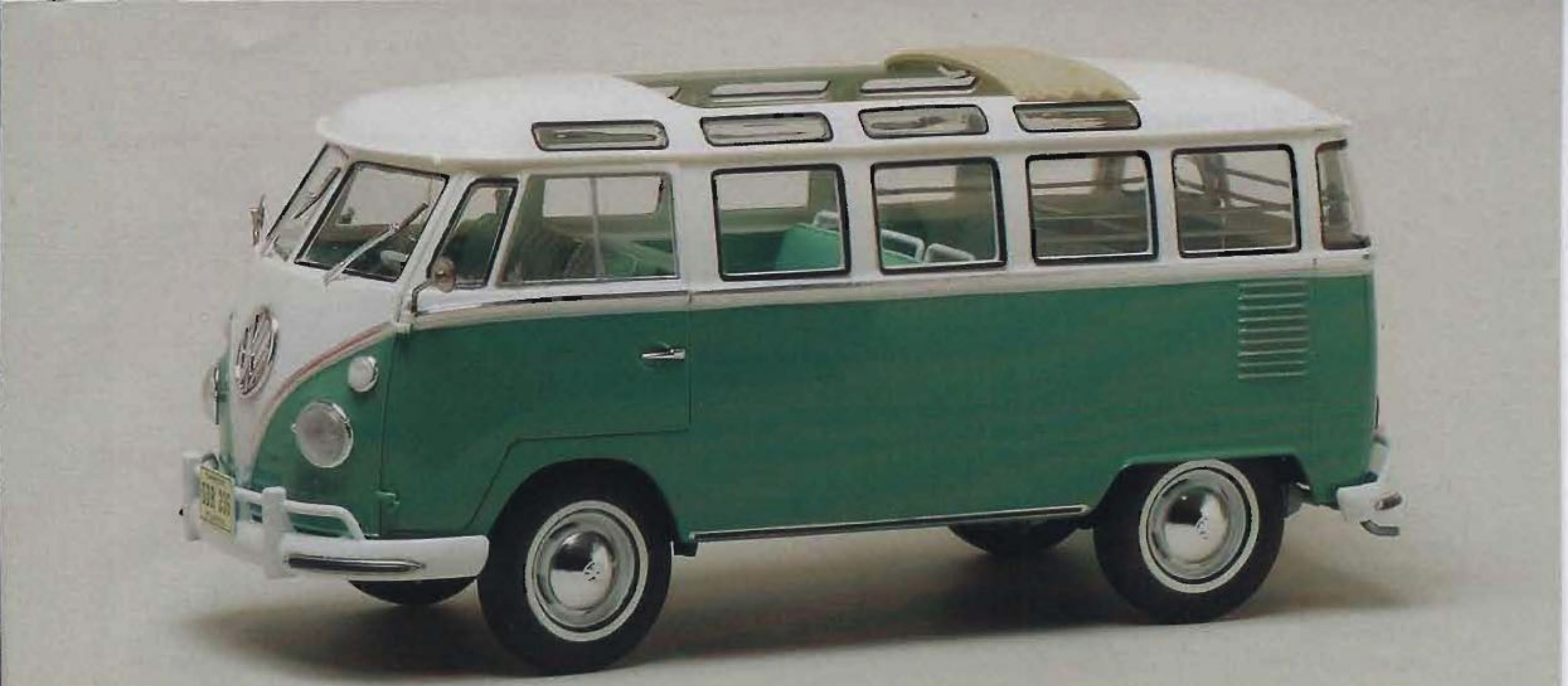
After a coat of Model Master Acryl sand, I started masking with 6mm Tamiya and 2mm Gunze Sangyo tape. It wasn't complicated, just time-consuming. Between masking, I applied Acryl medium green and Polly Scale schwarzgrün before applying Tamiya olive drab as called for in the instructions. (I think the latter is too dark, but I'm not starting again!) I spent about 35 hours masking and painting. After removing the tape, I added the last parts and touched up the camo by hand. The few decals went on fine over a coat of Pledge Future floor polish; they were very thin, inclined to stick, and needed no solvent.

Because it was a parade vehicle, I kept weathering to a minimum.

The model is sharp looking and resembles the few photos I've found of the ZTZ. I enjoyed the build, and it's great to have a new modern armor subject to build.

*– Aaron Skinner*

**Kit:** No. 82440 **Scale:** 1/35 **Manufacturer:** HobbyBoss, www.hobbyboss.com, available from Squadron Mail Order, 877-414-0434, www.squadron.com **Price:** $48.99 **Comments:** Injection-molded, 454 parts (6 photoetched; 18 vinyl polycaps), decals **Pros:** Interesting subject; good detail and fits; good color diagrams **Cons:** Minor warpage in gun barrel



**It might be hard to find a more quintessentially '60s vehicle than the VW microbus. Revell Germany's kit captures it well.**

# Revell Germany Volkswagen T1 "Samba Bus"

Revisiting a vintage subject with new tooling, Revell Germany presents a Volkswagen T1 23-window "Samba Bus" (the name given to the deluxe-trim 23-window van with the large, folding canvas sunroof). It's much more comprehensive than either the 1950s vintage Revell 1/25 scale 21-window van or the more recent curbside Hasegawa 23-window van.

There are difficulties: The simplified engine is hard to see; separate body panels feature molded door and side-panel detail on their back sides, complicating masking and painting a two-tone exterior and three-tone interior. Many panels have ejector-pin marks, some impossible to remove without damaging molded details. Also, not everything that should be chrome is provided on the chrome-plated sprue, namely the American bumper spears, exterior mirrors, and interior protector bars.

The chassis has the proper reinforced belly-pan design for the open-top Samba, and rear axle covers, but no semblance of the gear-driven rear-wheel hubs. The front wheels are posable.

Separate body panels attach to the chassis, and the completed body fits well; the roof, added near the end, provides a lot of support and alignment. The multipiece body allows opening doors, hatch, and engine cover, all with integral, in-scale hinges. Unfortunately, these fragile hinges don't allow many test fits before breaking. You could drill out the hinges to accept brass pins that would be much sturdier.

Each pane of glass is separate and takes time to clean up; detailing the rubber gaskets around each window can be tedious, too, but easier with a chisel-tip Sharpie. The glass fits from outside.

The wheels will look too big if you simply paint the whitewalls as the kit provides them. Location of the whitewalls is vague; there is an engraved line inboard of the wheel edge, and I believe that's where the visual wheel lip goes. Paint the outer edge of the wheel satin black to match the tire (unless you want wide whitewalls). If you apply a narrow white line between the raised rib on the tire and the (painted black) wheel lip, you'll end up with a period-authentic narrow whitewall, but with a bit too much black between the wheel edge and the engraved line. I used Pegasus' narrow "peel 'n' stick" vinyl whitewalls; they left a narrow black band on the wheel edge without interfering with the tire/wheel edge.

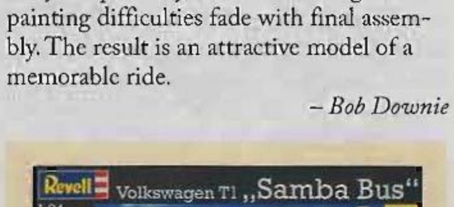
Silver decals are provided for a lot of the chrome trim. I used foil to detail the beltline trim just above the color-separation line. There are tiny, separate silver decals for the rear vents, but I used a silver Sharpie. You could cover this area in foil before painting, then polish off the paint to expose the foil vent detail.

On the front seat, I painted the base color and sanded the edges back to the molded styrene color to replicate the seat's off-white piping. There are interior decals for the instrument panel and steering wheel, and several different license plate decals. A separate chrome VW emblem fits a recess on the front, and exterior side mirrors fit into small retainers on the doors. You can choose European or American bumpers.

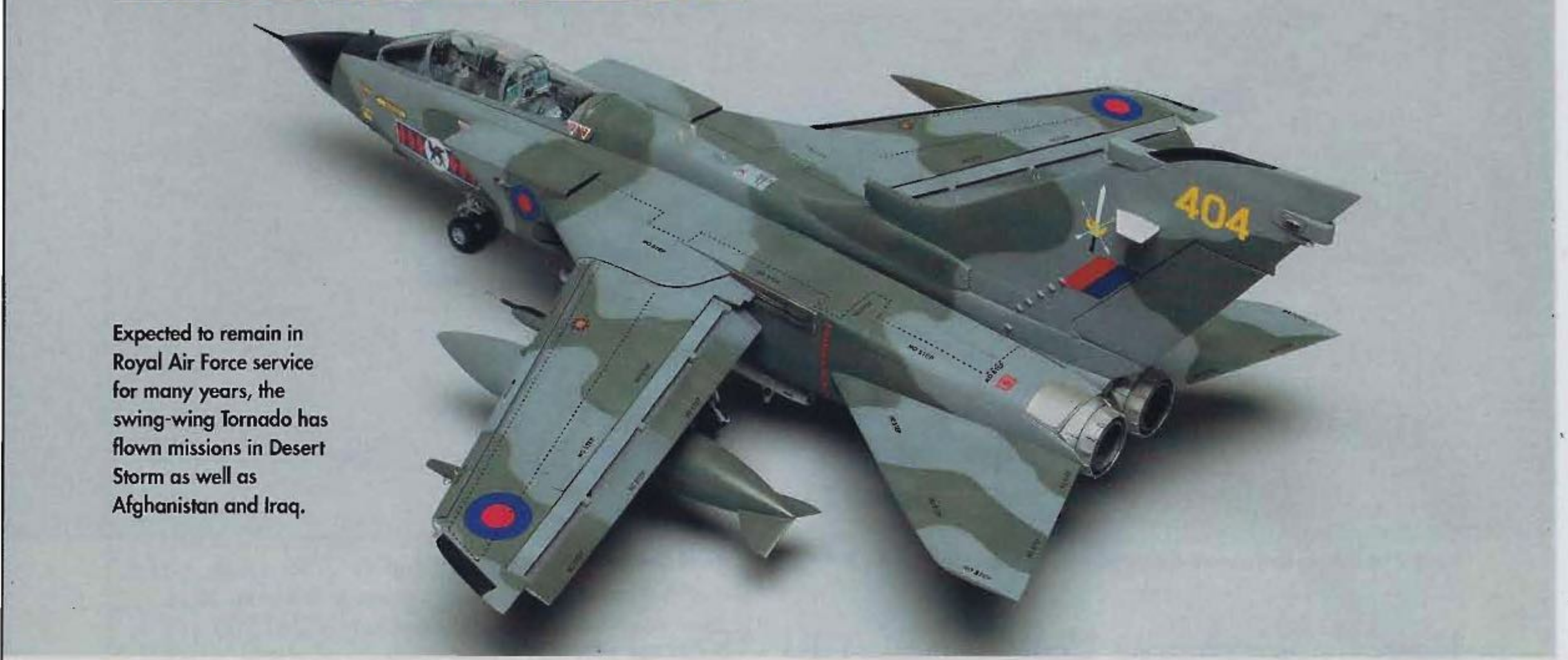
Slight interference with the floorboard at the front causes that part to pivot slightly outboard at the top, keeping the doors from fitting until attaching the roof aligns everything. Sand the front of the footwell so the front end and doors will fit tightly.

Overall, I highly recommend Revell Germany's VW. Though complicated, the body fits precisely, and the masking and painting difficulties fade with final assembly. The result is an attractive model of a memorable ride.

*– Bob Downie*



**Kit:** No. 07399 **Scale:** 1/24 **Manufacturer:** Revell Germany, 49-05-223-965-0, www.revell.de **Price:** $30 **Comments:** Injection-molded, 173 parts, decals **Pros:** Excellent fit; working hinges; great level of detail **Cons:** Some nasty ejector-pin marks; not all chrome accounted for



Expected to remain in Royal Air Force service for many years, the swing-wing Tornado has flown missions in Desert Storm as well as Afghanistan and Iraq.

# HobbyBoss Tornado IDS

Despite long years on the front line, the Tornado has escaped the recent notice of kit makers – at least in 1/48 scale. But HobbyBoss is trying to fill that void with a series of Tornado boxings. The first kit released is the IDS, or Interdictor/Strike. The kit comes with most parts needed to make a German or RAF IDS Tornado. Underwing stores include HARM missiles, recon pod, MW-1 weapons dispenser, Sargent Fletcher refueling store (listed as a drop tank), Cerberus ECM pod, BOZ countermeasures dispenser, and bombs, all for the German version. Also included for the RAF are ALARM missiles, although HobbyBoss does not include the standard RAF Sky Shadow ECM pod. Despite the instructions, only two Sidewinders are included, although the range pod provided is a bonus.

There is also a handful of parts included for other versions. A large decal sheet includes colorful markings for a German anniversary scheme and an RAF weapons training squadron machine, as well as more stencils than a scrapbooking catalog.

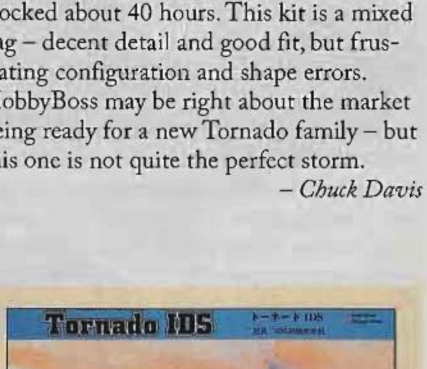
There are many frustrating shape errors in the kit, such as the rounded tips of the stabilizers (5 minutes with a saw and sandpaper corrected that). HobbyBoss includes photoetched-metal parts to pose the thrust reversers open – a waste of kit engineering, as they are only deployed when landing. Some careful fitting and deletion of the photoetched metal had mine closed up easily, along with the speed brakes. Also missing from the kit – and highly visible – is a good view block for the intakes. A screen is included, but it doesn't do the job, leaving the swing wing completely open to view. The canopy has some shape issues, although it is nice and thin. Remember to open up all the holes you need for the various sensors and weapons before you close up the fuselage – HobbyBoss molded the holes for the recon version GR.1A infrared line scanner open, but you have to drill out the laser rangefinder system that is on all but the very early IDS. (More frustration!)

The instructions would have you build the entire rear fuselage, including weapons, then join it to the fully assembled front fuselage. To me this seemed a recipe for disaster, so I built the kit in a more-conventional manner. I cut a piece of sprue to size for a brace in the rear fuselage joint under the speed brakes. Once you use your references to sort out the correct options and repair whatever shape errors you feel you must, the rest of the kit fits well. I did not need filler except for the intake interior. I left the stabilizers off until the end to aid in assembly and painting.

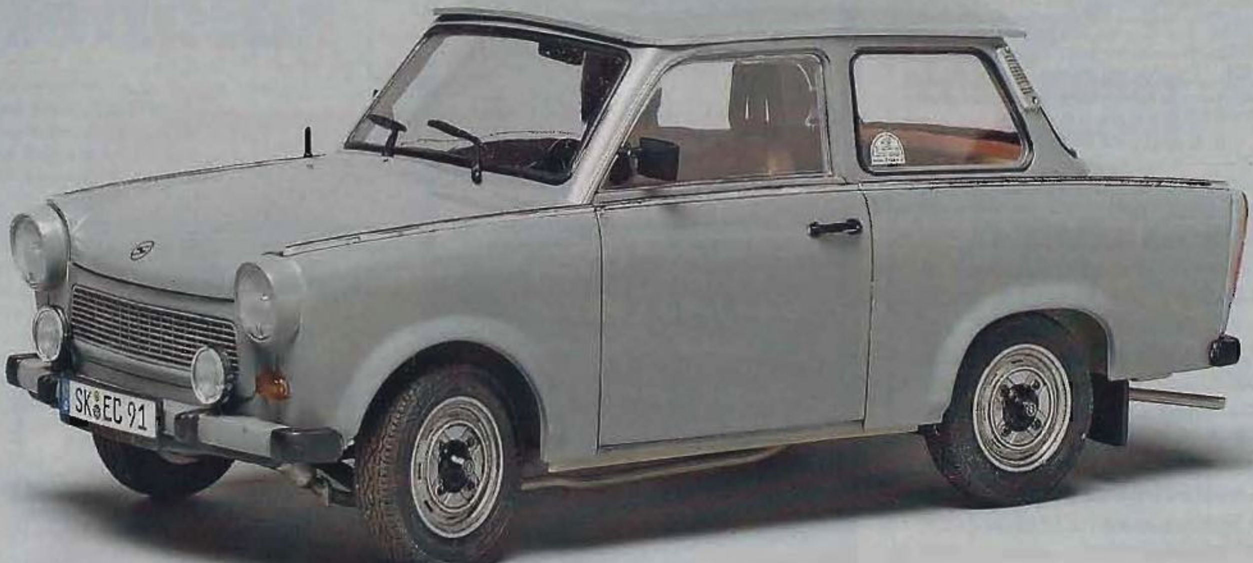
Even though I knew I couldn't fully load out the RAF version, I just had to use those huge ALARM missiles. I forgot that adding the IR line scanner means you must delete a cannon, an option not offered in the kit. The wings assemble easily, but the flap configuration is simplified.

After final painting and assembly, I had clocked about 40 hours. This kit is a mixed bag – decent detail and good fit, but frustrating configuration and shape errors. HobbyBoss may be right about the market being ready for a new Tornado family – but this one is not quite the perfect storm.

*– Chuck Davis*



**Kit:** No. 80353 **Scale:** 1/48 **Manufacturer:** HobbyBoss, www.hobbyboss.com, available from Squadron Mail Order, 877-414-0434, www.squadron.com **Price:** $93.99 **Comments:** Injection-molded, 416 parts (12 photoetched), decals **Pros:** Impressive scale **Cons:** Inaccurate shape; given options don't make sense; incomplete RAF weapons load



**How quaint! Revell Germany's fully detailed Trabant captures the boxy lines and clunky details of East Germany's 23hp people mover perfectly.**

# Revell Germany Trabant 601S

East Germany's people's car, the Trabant (frequently referred to as the Trabbi) was built in several versions from 1958 to 1991. The small car was powered by a two-stroke, air-cooled 600cc engine that developed a sedate 23hp. Despite the shortcomings, customers waited years to get one. When the Berlin Wall fell in 1989, many of the plastic-bodied cars were abandoned. But the car has gained a cult following in recent years.

**I LIKED THE INCLUSION OF PEDALS AND SEAT BELTS ...**

This isn't the first time Revell Germany has released a Trabant, but this kit is the first with a complete engine and comprehensive interior.

Molded in white plastic, the parts feature crisp surface detail and no sign of sink marks. There are a few ejector-pin marks, but most are hidden on the finished model.

The windshield and windows, thin and clear, are designed to be attached from outside after painting. You will need to paint the rubber seals surrounding the glass, but the moldings are sharp so it's relatively easy. No plated parts are included, but all of the parts that are bare metal on the car are molded on a single sprue so they can be painted together.

Five tiny vinyl tires feature realistic tread detail and minor mold seams.

Color callouts are provided for Revell paints only. (A cross reference to Testors paints is available at www.revell.com/support/paint-guide.html.)

Decals provide body trim and badges as well as license plates and national decals for several European countries.

Starting with the engine, you can appreciate just how tiny the car is. Fortunately, the fit of all the parts is good – it's sort of like building a watch – except for the air cleaner (Part A30), which sits a fraction of an inch too tall and interferes with the hood. Trim the locating pins and make sure the part fits snugly atop the engine to eliminate the problem.

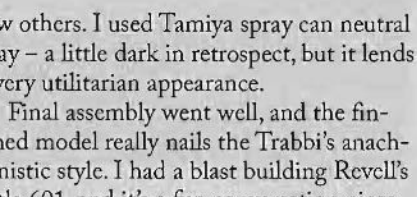
I painted almost all of the car's components before assembly, touching up after construction to remove blemishes.

The interior went together well. I liked the inclusion of pedals and seat belts as well as decal instruments.

The instructions give two body color options, neutral gray and light blue. Research indicates these colors were very common, but the cars were available in a few others. I used Tamiya spray can neutral gray – a little dark in retrospect, but it lends a very utilitarian appearance.

Final assembly went well, and the finished model really nails the Trabbi's anachronistic style. I had a blast building Revell's little 601, and it's a fun conversation piece among the pickup trucks and muscle cars in my collection.

*– Aaron Skinner*



**Kit:** No. 07256 **Scale:** 1/24
**Manufacturer:** Revell Germany, Revell Germany, 49-05-223-965-0, www.revell.de **Price:** $34.24
**Comments:** Injection-molded, 138 parts (5 vinyl), decals **Pros:** Clean moldings; good detail and fit; nice engine and interior; good decals
**Cons:** Color callouts for Revell paint only

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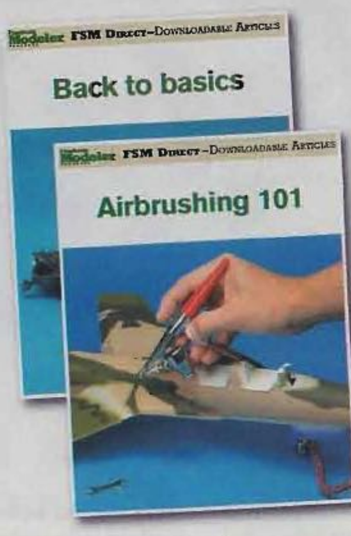
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## COMING EVENTS

**FL, VENICE:** 15th Annual Model Contest & Show. Hosted by IPMS/Wings, Wheels & Keels Model Club, at Woodmere Park Auditorium. Saturday, May 8, 2010. Free Admission. Contact Randy Whitacre 941-627-3880 or Ken Zuk 941-426-0774. E-mail: mazkaz102@verison.net

**MN, PLYMOUTH** Nordic-Con Model Show and Contest with vendor room, raffle and special interest awards. Productivity, Inc., 15150 25th Avenue N (1 mile SW of Hwy 55 & 494). Saturday, September 25th from 9:00am to 4:00pm. Contact Bob Maderich @ 612-423-2985 or robertmaderich69@hotmail.com or Sean Brzozowski at spitfire.mk5b@gmail.com or our Web site www.aerohistorians.org

**OK, JET:** Nascatunga Rural Fire Association sponsored Model and Hobby Tailgate Swap Meet. Route 1 Box 68AB, Jet. 12 miles north of Jet or 5.5 miles south of Jnt SH #11/SH #38 on northside of Salt Plaines State Park. July 2-3, 2010. 8:00am-6:00pm, both days. $5 per site. Contact K Dale 580-626-4754 or nescfire@kanokla.net

**PA, GETTYSBURG:** The Artist Preservation Group invites you to "The Gettysburg Show", Fundraiser for the preservation of the 149th Pennsylvania Regimental Colors. The APG is hosting a Military Miniature & Toy Soldier show & Art Exhibit. Gettysburg Wyndham, 95 Presidentail Circle. July 16-18th, 2010. Tours, seminars and special events. Information: infomikeapg@aol.com or David at: oswalt2310@comcast.net

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**CANADA, ONTARIO, TORONTO:** IPMS Toronto and Peel Scale Modelers present the TORCAN 2010 Model Contest. CNIB Centre, 1929 Bayview Ave. Saturday, May 29, 2010. For further information please contact Chuck Rothman at 416-524-3198 or crothman@rogers.com or visit www.torcan-online.com

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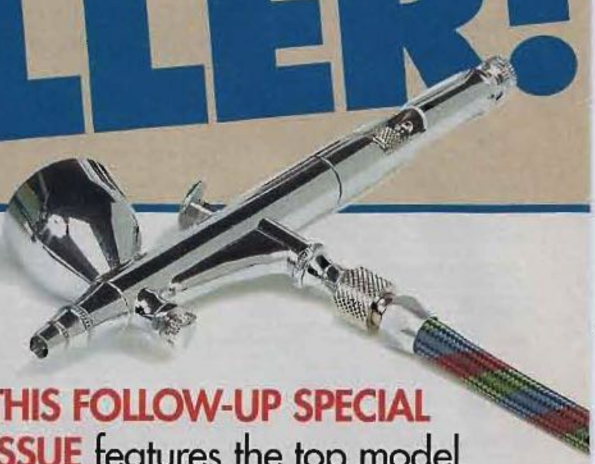

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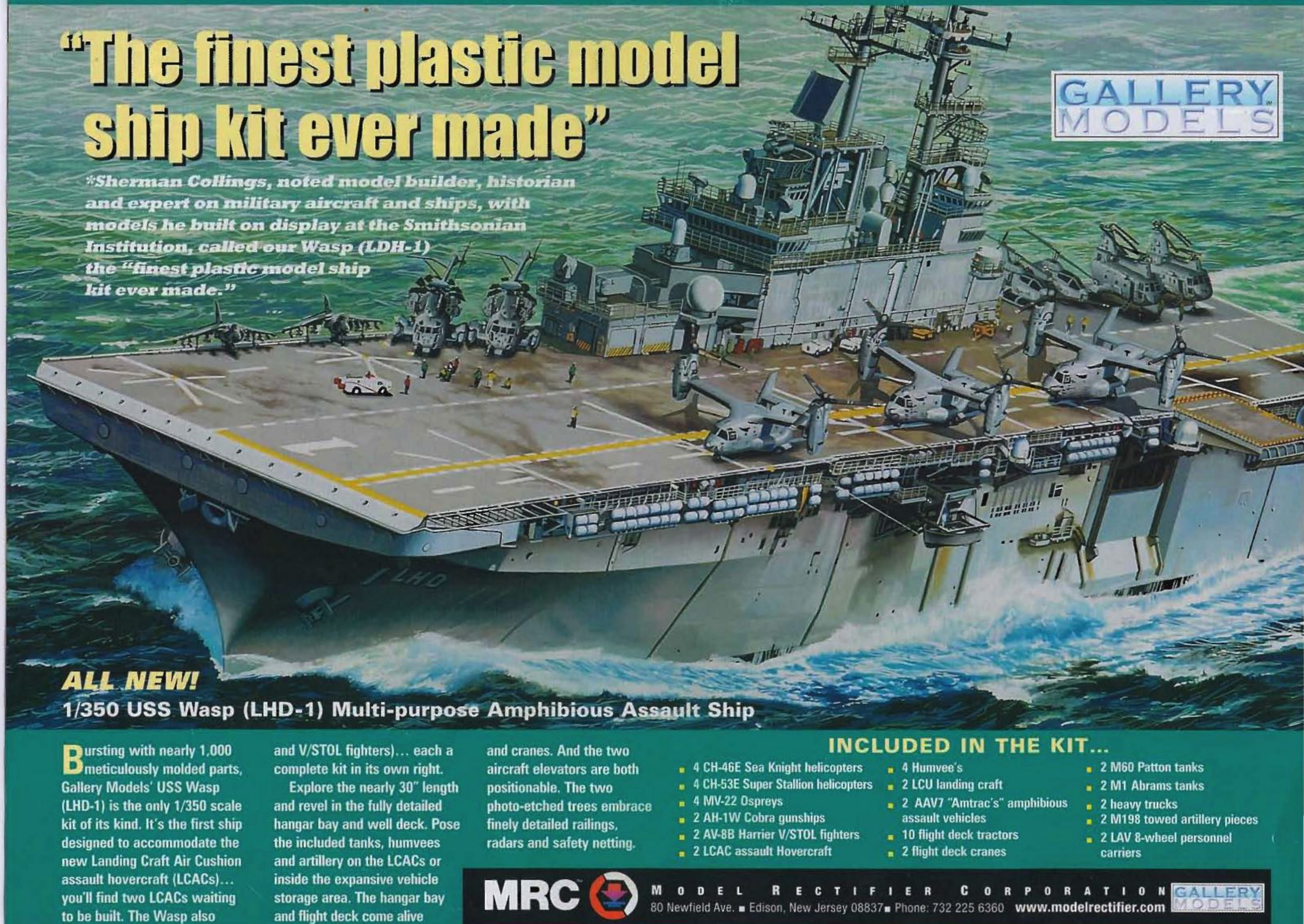

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